

Listing of the Claims:

1-8. (Canceled)

9-43. (cancel)

44. (New) A method of profiling gene expression in a human subject, the method comprising:

determining, for each gene of a set of genes, a level of RNA encoded by the gene in a blood sample of the subject, wherein the set comprises the genes identified as:

zinc finger protein (Hs.47371); zinc finger protein (Hs.78765); zinc finger protein 10 (KOX 1) (ZNF10); zinc finger protein 136 (clone pHZ-20) (ZNF136); zinc finger protein 140 (clone pHZ-39) (ZNF140); zinc finger protein 143 (clone pHZ-1) (ZNF143); zinc finger protein 148 (pHZ-52) (ZNF148); zinc finger protein 173 (ZNF173); zinc finger protein 198 (ZNF198); zinc finger protein 200 (ZNF200); zinc finger protein 207 (ZNF207); zinc finger protein 216 (ZNF216); zinc finger protein 217 (ZNF217); zinc finger protein 230 (ZNF230); Zinc finger protein 239 (ANF239); zinc finger protein 261 (ZNF261); zinc finger protein 262 (ANF262); zinc finger protein 263 (ZNF263); zinc finger protein 264 (ZNF264); zinc finger protein 42 (myeloid-specific retinoic acid-responsive) (ZNF42); zinc finger protein 45 (a Kruppel-associated box (KRAB) domain polypeptide) (ZNF45); zinc finger protein 76 (expressed in testis) (ZNF76); zinc finger protein 84 (HPF2) (ZNF84); zinc finger protein 85 (ZNF85); zinc finger protein 9 (ZNF9); zinc finger protein C2H2-25 (ZNF25); zinc finger protein clone L3-4; zinc finger protein homologous to Zfp-36 in mouse (ZFP36); zinc finger protein HZF4; zinc finger protein RIZ; zinc finger protein, subfamily 1A, 1 (Ikaros) (LYF1); 100 kDa coactivator; 10kD protein (BC10); 14-3-3 epsilon; 14-3-3 protein; 15 kDa selenoprotein (SEP15); 1-phosphatidylinositol-4-phosphate 5-kinase isoform C; 23 kD highly basic protein; 2-5A-dependent RNase; 2'-5'oligoadenylate synthetase 2 (OAS2); 26S proteasome subunit 11; 36 kDa phosphotyrosine protein; 3-phosphoglycerate dehydrogenase (PGAD); 3-prime-phosphoadenosine 5-prime-phosphosulfate synthase 1 (PAPSS1); 5-aminoimidazole-4-carboxamide ribonucleotide transformylase; 5'-nucleotidase; 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase 4 (PFKFB4); 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase (PF2K); 71 kd heat shock

cognate protein hsc70; 76 kDa membrane protein (P76); 8-oxoguanine DNA glycosylase (OGG1); a disintegrin and metalloprotease domain 10 (ADAM10); a disintegrin and metalloprotease domain 8 (ADAM8); A kinase anchor protein 95 (AKAP95); A kinase anchor protein, 149kD (AKAP149); Absent in melanoma 1 (AIM1); accessory proteins BAP31/BAP29 (DXS1357E); acetyl-Coenzyme A acyltransferase (peroxisomal 3-oxoacyl-Coenzyme A thiolase) (ACAA); acetyl-Coenzyme A transporter (ACATN); acidic 82 kDa protein; acidic protein rich in leucines (SSP29); Aconitase 2, mitochondrial (ACO2); actin binding protein MAYVEN; actin, beta (ACTB); actin, gamma 1 (ACTG1); actin-binding LIM protein (ABLIM); Actinin, alpha 1 (ACTN1); actinin, alpha 4 (ACTN4); activated p21cdc42Hs kinase (ACK); activated RNA polymerase II transcription cofactor 4 (PC4); activating transcription factor 1 (ATF1); activating transcription factor 2 (ATF2); activating transcription factor 4 (tax-responsive enhancer element B67) (ATF4); active BCR-related gene (ABR); acyl-CoA oxidase (AOX); acyl-Coenzyme A dehydrogenase, C-4 to C-12 straight chain (ACADM); acyl-Coenzyme A dehydrogenase, very long chain (ACADVL); acyloxyacyl hydrolase (neutrophil) (AOAH); adaptin, delta (ADTD); adaptin, gamma (ADTG); adaptor complex sigma3B (AP3S3); adaptor protein p150; adducin 1 (alpha) (ADD1); adducin 1 (alpha) (add1); adducin 3 (gamma) (ADD3); adenine nucleotide translocator 2 (fibroblast) (ANT2); adenine nucleotide translocator 3 (liver) (ANT3); adenomatous polyposis-coli protein (APC); adenosine deaminase, RNA-specific (ADAR); adenylate cyclase 3 (ADCY3); adenylate cyclase 7 (ADCY7); adenylate kinase 2 (AK2); adenylyl cyclase-associated protein (CAP); adipose differentiation-related protein; adipophilin (ADFP); ADP-ribosylation factor 1 (ARF1); ADP-ribosylation factor 3 (ARF3); ADP-ribosylation factor 4 (ARF4); ADP-ribosylation factor 5 (ARF5); ADP-ribosylation factor domain protein 1, 64kD (ARFD1); ADP-ribosyltransferase (NAD<sup>+</sup>; poly (ADP-ribose) polymerase) (ADPRT); adrenergic, beta, receptor kinase 1 (ADRBK1); adrenoleukodystrophy-like 1 (ALDL1); AF-17; A-gamma-globin; A-gamma-globin (chromosome 11 allele); agammaglobulinaemia tyrosine kinase (ATK); AHNAK nucleoprotein (desmoyokin) (AHNAK); alanyl (membrane) aminopeptidase (aminopeptidase N, aminopeptidase M, microsomal aminopeptidase, CD13, p150) (ANPEP); alcohol dehydrogenase 5 (class III), chi polypeptide (ADH5); aldehyde dehydrogenase 1, soluble (ALDH1); aldehyde dehydrogenase 10 (fatty aldehyde dehydrogenase) (ALDH10); aldehyde reductase 1 (low Km aldose reductase) (ALDR1); aldo-keto reductase family 1, member A1 (aldehyde reductase) (AKR1A1); aldo-keto

reductase family 1, member C3 (3-alpha hydroxysteroid dehydrogenase, type II) (AKR1C3); aldo-keto reductase family 7, member A2 (aflatoxin aldehyde reductase) (AKR7A2); aldolase A, fructose-bisphosphate (ALDOA); aldolase C, fructose-bisphosphate (ALDOC); alkaline phosphatase, liver/bone/kidney (ALPL); alpha mannosidase II isozyme; alpha thalassemia/mental retardation syndrome X-linked (ATRX); alpha-2 macroglobulin; alpha-2-globin; alpha-2-macroglobulin receptor/lipoprotein receptor protein (A2MR/LRP); alpha-polypeptide of N-acetyl-alpha-glucosaminidase (HEXA); alpha-spectrin; alpha-subunit of Gi2 a (GTP-binding signal transduction protein); aminin receptor 1 (67kD); Ribosomal protein SA (LAMR1); aminolevulinate, delta-, dehydratase (ALAD); amino-terminal enhancer of split (AES); amino-terminal enhancer of split (AES); AMP deaminase isoform L (AMPD2); amphiphysin (Stiff-Mann syndrome with breast cancer 128kD autoantigen) (AMPH); amphiphysin II; amphiphysin-like (AMPHL); AMY-1; amyloid beta (A4) precursor protein-binding, family B, member 1 (Fe65) (APBB1); amyloid beta (A4) precursor-like protein 2 (APLP2); amyloid precursor protein (APP); annexin I (lipocortin I) (ANX1); annexin II; annexin II (lipocortin II; calpactin I, heavy polypeptide) (ANX2); annexin IV (placental anticoagulant protein II) (ANX4); annexin V (endonexin II) (ANX5); annexin V (endonexin II) (ANXV); annexin VI (p68) (ANX6); annexin VII (synexin) (ANX7); antigen identified by monoclonal antibodies 12E7, F21 and O13 (MIC2); antigen identified by monoclonal antibodies 4F2, TRA1.10, TROP4, and T43 (MDU1); anti-oxidant protein 2 (non-selenium glutathione peroxidase, acidic calcium-independent phospholipase A2) (KIAA0106); APEX nuclease (multifunctional DNA repair enzyme) (APEX); apoptosis inhibitor 1 (API1); apoptosis inhibitor 4 (survivin) (API4); apoptosis inhibitor 5 (API5); apoptosis specific protein (ASP); apoptotic protease activating factor (APAF1); aquaporin 3 (AQP3); aquaporin 9 (AQP9); arachidonate 12-lipoxygenase (ALOX12); arachidonate 5-lipoxygenase-activating protein (ALOX5AP); ariadne homolog (ARI); ariadne-2 (D. melanogaster) homolog (all-trans retinoic acid inducible RING finger ) (ARI2); ARP1 (actin-related protein 1, yeast) homolog A (centractin alpha) (ACTR1A); ARP2 (actin-related protein 2, yeast) homolog (ACTR2); ARP2/3 protein complex subunit 34 (ARC34); Arp2/3 protein complex subunit p41 (ARC41); Arp2/3 protein complex subunit p16 (ARC16); Arp2/3 protein complex subunit p20 (ARC20); Arp2/3 protein complex subunit p21(ARC21); ARP3 (actin-related protein 3, yeast) homolog (ACTR3); arrestin, beta 2 (ARRB2); arsA (bacterial) arsenite transporter, ATP-binding, homolog 1 (ASNA1); aryl

hydrocarbon receptor nuclear translocator-like (ARNTL); aryl hydrocarbon receptor-interacting protein (AIP); arylsulfatase A (ARSA); asialoglycoprotein receptor 2 (ASGR2); asparaginyl-tRNA synthetase (NARS); aspartyl-tRNA synthetase (DARS); ataxia telangiectasia mutated (includes complementation groups A, C and D) (ATM); ataxin-2-like protein A2LP (A2LG); ATF6; ATP synthase (F1-ATPase) alpha subunit, mitochondrial; ATP synthase beta subunit gene; ATP synthase, H<sup>+</sup> transporting, mitochondrial F0 complex, subunit b, isoform 1 (ATP5F1); ATP synthase, H<sup>+</sup> transporting, mitochondrial F0 complex, subunit c (subunit 9), isoform 1 (ATP5G1); ATP synthase, H<sup>+</sup> transporting, mitochondrial F1 complex, alpha subunit, isoform 1, cardiac muscle (ATP5A1); ATP synthase, H<sup>+</sup> transporting, mitochondrial F1 complex, beta polypeptide (ATP5B); ATP synthase, H<sup>+</sup> transporting, mitochondrial F1 complex, gamma polypeptide 1 (ATP5C1); ATP synthase, H<sup>+</sup> transporting, mitochondrial F1F0, subunit g (ATP5JG); ATP/GTP-binding protein (HEAB); ATPase, Ca<sup>++</sup> transporting, ubiquitous (ATP2A3); ATPase, H<sup>+</sup> transporting, lysosomal (vacuolar proton pump) 21kD (ATP6F); ATPase, H<sup>+</sup> transporting, lysosomal (vacuolar proton pump) 31kD (ATP6E); ATPase, H<sup>+</sup> transporting, lysosomal (vacuolar proton pump) 42kD; Vacuolar proton-ATPase, subunit C; V-ATPase, subunit C (ATP6D); ATPase, H<sup>+</sup> transporting, lysosomal (vacuolar proton pump), alpha polypeptide, 70kD, isoform 1 (ATP6A1); ATPase, H<sup>+</sup> transporting, lysosomal (vacuolar proton pump), beta polypeptide, 56/58kD, isoform 2 (ATP6B2); ATPase, H<sup>+</sup> transporting, lysosomal (vacuolar proton pump), member J (ATP6J); ATPase, H<sup>+</sup> transporting, lysosomal (vacuolar proton pump), subunit 1 (ATP6S1); ATP-binding cassette 50 (TNF-alpha stimulated) (ABC50); ATP-binding cassette protein M-ABC1 (mitochondrial); ATP-dependent RNA helicase; atrial natriuretic factor (ANF); autoantigen (Hs.75528); autoantigen (Hs.75682); autoantigen La/SS-B; axin (AXIN1); axonemal dynein heavy chain (DNAH17); basement membrane-induced gene (ICB1); basic leucine zipper nuclear factor 1 (JEM-1) (BLZF1); basic transcription factor 3 (BTF3); basigin (BSG); BC-2; B-cell CLL/lymphoma 6 (zinc finger protein 51) (BCL6); B-cell translocation gene 1, anti-proliferative (BTG); BCL2/adenovirus E1B 19kD-interacting protein 2 (BNIP2); BCL2/adenovirus E1B 19kD-interacting protein 3-like (BNIP3L); beclin 1 (coiled-coil, myosin-like BCL2-interacting protein) (BECN1); beta-1,2-N-acetylglucosaminyltransferase II (MGAT2); beta-2-microglobulin (B2M); beta-hexosaminidase alpha chain (HEXA); beta-tubulin; BING4; biphenyl hydrolase-like (serine hydrolase) (BPHL); bone marrow stromal cell antigen 1 (BST1); box-dependent myc-interacting protein isoform

BIN1-10 (BIN1); brain my047 protein; branched chain keto acid dehydrogenase E1, alpha polypeptide (maple syrup urine disease) (BCKDHA); BRCA1 associated protein-1 (ubiquitin carboxy-terminal hydrolase) (BAP1); breakpoint cluster region protein, uterine leiomyoma, 1; barrier to autointegration factor (BCRP1); breakpoint cluster region protein, uterine leiomyoma, 2 (BCRP2); bromodomain-containing protein, 140kD (peregrin) (BR140); Bruton's agammaglobulinemia tyrosine kinase (Btk); Bruton's tyrosine kinase (BTK); BS4; BTG2 (BTG2); BTK region clone ftp; BTK region clone ftp-3; BUB3 (budding uninhibited by benzimidazoles 3, yeast) homolog (BUB3); butyrate response factor 1 (EGF-response factor 1) (BRF1); butyrophilin (BTF1); butyrophilin like receptor; CAG repeat containing (CTG4A); CAGH32; calcium/calmodulin-dependent protein kinase (CaM kinase) II gamma (CAMK2G); calcium/calmodulin-dependent protein kinase kinase (KIAA0787); calmodulin 1 (phosphorylase kinase, delta) (CALM1); calnexin (CANX); calpain, large polypeptide L1 (CAPN1); calpain, large polypeptide L2 (CANP2); calpain, small polypeptide (CAPN4); calpastatin (CAST); Calponin 2; calponin 2 (CNN2); calumenin (CALU); cAMP response element-binding protein CRE-Bpa (H\_GS165L15.1); cAMP-dependent protein kinase type II (Ht31); canicular multispecific organic anion transporter (CMOAT2); capping protein (actin filament) muscle Z-line, alpha 1 (CAPZA1); capping protein (actin filament) muscle Z-line, alpha 2 (CAPZA2); capping protein (actin filament) muscle Z-line, beta (CAPZB); capping protein (actin filament), gelsolin-like (CAPG); carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase (CAD); carbonic anhydrase V, mitochondrial (CA5); carboxypeptidase D (CPD); cardiac beta-myosin heavy chain; carnitine/acylcarnitine translocase (CACT); Cas-Br-M (murine) ecotropic retroviral transforming sequence (cbl); casein kinase 1, alpha 1 (CSNK1A1); casein kinase 2, alpha 1 polypeptide (CSNK2A1); casein kinase I gamma 3L (CSNK1G3L); CASP8 and FADD-like apoptosis regulator (CFLAR); caspase 1, apoptosis-related cysteine protease (interleukin 1, beta, convertase) (CASP1); caspase 10, apoptosis-related cysteine protease (CASP10); caspase 3, apoptosis-related cysteine protease (CASP3); caspase 4, apoptosis-related cysteine protease (CASP4); caspase 5, apoptosis-related cysteine protease (CASP5); caspase 8, apoptosis-related cysteine protease (CASP8); caspase 9, apoptosis-related cysteine protease (CASP9); catalase (CAT); catechol-O-methyltransferase (COMT); catenin (cadherin-associated protein), alpha 1 (102kD) (CTNNA1); cathelicidin antimicrobial peptide (CAMP); cathepsin B (CTSB); cathepsin C (CTSC); cathepsin D (lysosomal aspartyl protease) (CTSD);

cathepsin E (CTSE); cathepsin G (CTSG); cathepsin S (CTSS); cathepsin W (lymphopain) (CTSW); CCAAT/enhancer binding protein (C/EBP), alpha (CEBPA); CCAAT/enhancer binding protein (C/EBP), delta (CEBPB); CCAAT-box-binding transcription factor (CBF2); CD14 antigen (CD14); CD1C antigen, c polypeptide (CD1C); CD2 antigen (cytoplasmic tail)-binding protein 2 (CD2BP2); CD2 antigen (p50), sheep red blood cell receptor (CD2); CD2 cytoplasmic tail-binding protein 1 (CD2BP1); CD20 antigen (CD20); CD20 receptor (S7); CD22 antigen (CD22); CD24 signal transducer; CD33 antigen (gp67) (CD33); CD33 antigen-like 2; CD36 antigen (collagen type I receptor, thrombospondin receptor) (CD36); CD37 antigen (CD37); CD38 alt; CD39 antigen (CD39); CD3D antigen, delta polypeptide (TiT3 complex) (CD3D); CD3E antigen, epsilon polypeptide (TiT3 complex) (CD3E); CD3G antigen, gamma polypeptide (TiT3 complex) (CD3G); CD3Z antigen, zeta polypeptide (TiT3 complex) (CD3Z); CD3-zeta (clone pBS NK1); CD4 antigen (p55) (CD4); CD44 antigen (homing function and Indian blood group system (CD44); CD48 antigen (B-cell membrane protein) (CD48); CD53 antigen (CD53); CD63 antigen (melanoma 1 antigen) (CD63); CD68 antigen (CD68); CD74 antigen (invariant polypeptide of major histocompatibility complex, class II antigen-associated) (CD74); CD79A antigen (immunoglobulin-associated alpha) (CD79A); CD79B antigen (immunoglobulin-associated beta) (CD79B); CD8 antigen, alpha polypeptide (p32) (CD8A); CD8 antigen, beta polypeptide 1 (p37) (CD8B1); CD81 antigen (target of antiproliferative antibody 1 (CD81); CD84 antigen (leukocyte antigen) (CD84); CD86 antigen; CD9 antigen (p24) (CD9); CD97 antigen (CD97); CDC23 (cell division cycle 23, yeast, homolog) (CDC23); CDC37 homolog; Cdc42 effector protein 3 (CEP3); CDC-like kinase (CLK); CDC-like kinase 2 (CLK2); CDW52 antigen (CAMPATH-1 antigen) (CDW52); cell cycle progression restoration 8 protein(CPR8); cell division cycle 10 (homologous to CDC10 of *S. cerevisiae*) (CDC10); cell division cycle 20, *S.cerevisiae* homolog (CDC20); cell division cycle 25B (CDC25B); cell division cycle 42 (GTP-binding protein, 25kD) (CDC42); centromere protein B (80kD) (CENPB); cep250 centrosome associated protein; ceroid-lipofuscinosis, neuronal 2, late infantile (Jansky-Bielschowsky disease) (CLN2); CGI-19 protein; chaperonin containing TCP1, subunit 3 (gamma) (CCT3); chaperonin containing TCP1, subunit 4 (delta) (CCT4); chaperonin containing TCP1, subunit 6A (zeta 1) (CCT6A); chaperonin containing TCP1, subunit 7 (eta) (CCT7); Chediak-Higashi syndrome 1 (CHS1); chemokine (C-C motif) receptor 2 (CCR2); chemokine (C-C motif) receptor 7 (CCR7); chemokine (C-X3-C) receptor 1 (CX3CR1); chemokine (C-X-C

motif), receptor 4 (fusin) (CXCR4); chitinase 3-like 1 (cartilage glycoprotein-39) (CHI3L1); chitinase 3-like 2 (CHI3L2); chloride channel 6 (CLCN6); Chloride intracellular channel 1 (CLIC1); chondroitin sulfate proteoglycan 2 (versican) (CSPG2); chondroitin sulfate proteoglycan core protein; chromodomain helicase DNA binding protein 1 (CHD1); chromodomain helicase DNA binding protein 1-like (CHD1L); chromodomain helicase DNA binding protein 2 (CHD2); chromodomain helicase DNA binding protein 3 (CHD3); chromodomain helicase DNA binding protein 4 (CHD4); chromosome 1 open reading frame 7 (C1ORF7); chromosome 1 specific transcript KIAA0493; chromosome 17 open reading frame 1B (C17ORF1B); chromosome 4 open reading frame 1 (C4ORF1); chromosome condensation 1-like (CHC1L); chromosome X open reading frame 5 (CXORF5); chromosome-associated polypeptide C(CAP-C); cig42; cig5; citrate synthase (CS); class I major histocompatibility antigen (HLA-Cw3); clathrin assembly protein lymphoid myeloid leukemia (CALM); clathrin heavy chain; clathrin, heavy polypeptide-like 2 (CLTCL2); clathrin-associated/assembly/adaptor protein, medium 1 (CLAPM1); cleavage stimulation factor, 3' pre-RNA, subunit 3, 77kD (CSTF3); clk3; clone 23815 (Hs.82845); clone 24592 mRNA sequence; Clq/MBL/SPA receptor C1qR(p) (); clusterin (complement lysis inhibitor, SP-40,40, sulfated glycoprotein 2, testosterone-repressed prostate message 2, apolipoprotein J) (CLU); CMP-sialic acid transporter (CMPST); CMRF35; c-myc oncogene containing coxIII; coagulation factor II (thrombin) receptor (F2R); coagulation factor V (proaccelerin, labile factor) (F5); coagulation factor XIII a subunit; coagulation factor XIII, A1 polypeptide (F13A1); coated vesicle membrane protein (RNP24); coatomer protein complex, subunit alpha (COPA); Cofilin 1 (non-muscle) (CFL1); cold inducible RNA-binding protein (CIRBP); cold shock domain protein A (CSDA); collagen, type IX, alpha 2 (COL9A2); colony stimulating factor 1 receptor, formerly McDonough feline sarcoma viral (v-fms) oncogene homolog (CSF1R); colony stimulating factor 2 receptor, beta, low-affinity (granulocyte-macrophage) (CSF2RB); colony stimulating factor 3 receptor (granulocyte) (CSF3R); complement component 5 receptor 1 (C5a ligand) (C5R1); conserved gene amplified in osteosarcoma (OS4); COP9 (constitutive photomorphogenic, Arabidopsis, homolog) subunit 3 (COPS3); COP9 homolog (HCOP9); COPII protein, homolog of s. cerevisiae SEC23p (SEC23A); copine I (CPNE1); coproporphyrinogen oxidase (coproporphyrin, harderoporphyrin) (CPO); core-binding factor, beta subunit (CBFB); coronin; cot (cancer Osaka thyroid) oncogene (COT); cryptochrome 1 (photolyase-like) (CRY1); CTD (carboxy-terminal

domain, RNA polymerase II, polypeptide A) phosphatase, subunit 1 (CTDP1); C-terminal binding protein 1 (CTBP1); C-terminal binding protein 2 (CTBP2); CUG triplet repeat, RNA-binding protein 1 (CUGBP1); cullin 1 (CUL1); cullin 3 (CUL3); cut (Drosophila)-like 1 (CCAAT displacement protein) (CUTL1); cyclin D2 (CCND2); cyclin D3 (CCND3); cyclin G1 (CNNG1); cyclin I; cyclin T2 (CNNT2); cyclin-dependent kinase 2 (CDK2); cyclin-dependent kinase inhibitor (p27Kip1); cyclin-dependent kinase inhibitor 1A (p21, Cip1) (CDKN1A); cystatin B (stefin B) (CSTB); cysteine and glycine-rich protein 3 (cardiac LIM protein) (CSRP3); cytidine deaminase (CDA); cytochrome b(-245) beta chain N-terminal region (X-linked granulomatous disease gene); cytochrome b-245, beta polypeptide (chronic granulomatous disease) (CYBB); cytochrome c oxidase subunit IV (COX4); cytochrome c oxidase subunit Vb (COX5B); cytochrome c oxidase subunit VII-related protein (COX7RP); cytokine suppressive anti-inflammatory drug binding protein 1 (p38 MAP kinase) (CSBP1); Cytoplasmic antiproteinase=38 kda intracellular serine proteinase inhibitor; cytotoxic granule-associated RNA-binding protein p40-TIA-1; D123 (D123); D2-2; D38; damage-specific DNA binding protein 1 (127kD) (DDB1); DEAD/H (Asp-Glu-Ala-Asp/His) box binding protein 1 (DDXBP1); DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide (72KD) (P72); DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 1 (DDX1); DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 15 (DDX15); DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 16 (DDX16); DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 3 (DDX3); DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 5 (RNA helicase, 68kD) (DDX5); DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 6 (RNA helicase, 54kD) (DDX6); DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 8 (RNA helicase, 54kD) (DDX8); DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 9 (RNA helicase A, nuclear DNA helicase II; leukophysin) (DDX9); DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide, Y chromosome (DBY); Death associated protein 3 (DAP3); death effector domain-containing protein (DEDD); death-associated protein 6 (DAXX); dedicator of cyto-kinesis 2 (DOCK2); defender against cell death 1 (DAD1); Defensin, alpha 1, myeloid-related sequence (DEFA1); DEK gene (D6S231E); delta sleep inducing peptide, immunoreactor (DSIP1); dendritic cell protein (GA17); deoxycytidine kinase (DCK); deoxyribonuclease II, lysosomal (DNASE2); DGS-I; diacylglycerol kinase; diacylglycerol kinase alpha (DAGK1) (clone 24); diaphanous (Drosophila, homolog) 1 (DIAPH1); diaphorase (NADH) (cytochrome b-5 reductase) (DIA1); differentiated Embryo Chondrocyte expressed



gene 1 (DEC1); differentiation antigen CD20; DiGeorge syndrome critical region gene 2 (DGCR2); dihydrolipoamide dehydrogenase (E3 component of pyruvate dehydrogenase complex, 2-oxo-glutarate complex, branched chain keto acid dehydrogenase complex) (DLD); dihydrolipoamide S-acetyltransferase (E2 component of pyruvate dehydrogenase complex) (DLAT); dihydropyrimidinase-like 2 (DPYSL2); dinG gene; diphtheria toxin resistance protein required for diphthamide biosynthesis (*Saccharomyces*)-like 2 (DPH2L2); DJ-1 protein; Dmx-like 1 (DMXL1); DNA (cytosine-5-)-methyltransferase 1 (DNMT1); DNA fragmentation factor, 40 kD, beta subunit (DFFB); DNA fragmentation factor, 45 kD, alpha subunit (DFFA); DNA mismatch repair protein (hMLH1); DNA segment on chromosome X (unique) 648 expressed sequence; DNA segment, single copy probe LNS-CAI/LNS-CAII (deleted in polyposis (D5S346); DnaJ protein; docking protein 2, 56kD (DOK2); dolichyl-diphosphooligosaccharide-protein glycosyltransferase (DDOST); dolichyl-phosphate mannosyltransferase polypeptide 1, catalytic subunit (DPM1); down-regulated by activation (immunoglobulin superfamily) (DORA); D-type cyclin-interacting protein 1 (DIP1); dual specificity phosphatase 1 (DUSP1); dual specificity phosphatase 11 (RNA/RNP complex 1-interacting) (dusp11); dual specificity phosphatase 3 (vaccinia virus phosphatase VH1-related) (DUSP3); dual specificity phosphatase 6 (DUSP6); dynactin 1 (p150, Glued (*Drosophila*) homolog) (DYTN1); dynamin 2 (DNM2); dynein, cytoplasmic, light intermediate polypeptide 2 (DNCLI2); dyskeratosis congenita 1, dyskerin (DKC1); dystonia 1, torsion (autosomal dominant) (DYT1); dystrobrevin, beta (DTNB); dystrophia myotonica-containing WD repeat motif (DMWD); dystrophia myotonica-protein kinase (DMPK); E1B-55kDa-associated protein; E2F transcription factor 3 (E2F3); E2F transcription factor 4, p107/p130-binding (E2F4); E2F transcription factor 5, p130-binding (E2F5); E74-like factor 1 (ets domain transcription factor) (ELF1); E74-like factor 4 (ets domain transcription factor) (ELF4); early development regulator 2 (homolog of polyhomeotic 2) (EDR2); EBV induced G-protein coupled receptor (EBI2); ecotropic viral integration site 2B (EVI2B); ectin, galactoside-binding, soluble, 1 (galectin 1) (LGALS1); EGF-like-domain, multiple 4 (EGFL4); eIF-2-associated p67 homolog; elav-type RNA-binding protein (ETR-3); electron-transfer-flavoprotein, alpha polypeptide (glutaric aciduria II) (ETFA); ELK3, ETS-domain protein (SRF accessory protein 2) (ELK3); elongation factor 1-beta; elongation factor Ts (mitochondrial protein); elongation factor Tu-nuclear encoded mitochondrial; eMDC II protein; ems1 sequence (mammary tumor and squamous cell carcinoma-associated (p80/85 src substrate)

(EMS1); endogenous retroviral element HC2; endosulfine alpha (ENSA); endothelial differentiation, sphingolipid G-protein-coupled receptor, 1 (EDG1); endothelial monocyte-activating polypeptide (EMAPII); enolase 1, (alpha) (ENO1); enolase 2, (gamma, neuronal) (ENO2); enolase-alpha; enoyl Coenzyme A hydratase 1, peroxisomal (ECH1); enoyl Coenzyme A hydratase, short chain, 1, mitochondrial (ECHS1); epidermal growth factor receptor pathway substrate 15 (EPS15); epithelial membrane protein 3 (EM[P3]); Epoxide hydrolase 1, microsomal (xenobiotic) (EPHX1); ERF-2; ERp28 protein; erythrocyte membrane protein; erythroleukemic cells K562; EST (Hs.189509); estrogen receptor-related protein (hERRa1); ET binding factor 1 (SBF1); ets domain protein ERF; eukaryotic translation elongation factor 1 alpha 1 (EEF1A1); eukaryotic translation elongation factor 1 beta 2 (EEF1B2); eukaryotic translation elongation factor 1 delta (guanine nucleotide exchange protein) (EEF1D); eukaryotic translation elongation factor 1 gamma (EEF1G); eukaryotic translation elongation factor 2 (EEF2); eukaryotic translation initiation factor 2, subunit 1 (alpha, 35kD ) (EIF2S1); eukaryotic translation initiation factor 2, subunit 2 (beta, 38kD ) (EIF2S2); eukaryotic translation initiation factor 2, subunit 3 (gamma, 52kD) (EIF2S3); eukaryotic translation initiation factor 3, subunit 10 (theta, 150/170kD) (EIF3S10); eukaryotic translation initiation factor 3, subunit 2 (beta, 36kD) (EIF3S2); eukaryotic translation initiation factor 3, subunit 3 (gamma, 40kD) (EIF3S3); eukaryotic translation initiation factor 3, subunit 4 (delta, 44kD) (EIF3S4); eukaryotic translation initiation factor 3, subunit 6 (48kD) (EIF3S6); eukaryotic translation initiation factor 3, subunit 6 (EIF3S6); eukaryotic translation initiation factor 3, subunit 7 (zeta, 66/67kD) (EIF3S7); eukaryotic translation initiation factor 3, subunit 8, 110KD (EIF3S8); eukaryotic translation initiation factor 4 gamma, 1 (EIF4G); eukaryotic translation initiation factor 4 gamma, 1 (EIF4G1); eukaryotic translation initiation factor 4 gamma, 2 (EIF4G2); eukaryotic translation initiation factor 4 gamma, 2 (EIFG2); eukaryotic translation initiation factor 4A, isoform 1 (EIF4A1); eukaryotic translation initiation factor 4A, isoform 2 (EIF4A2); eukaryotic translation initiation factor 4B (EIF4B); Eukaryotic translation initiation factor 4E binding protein 2 (EIF4EBP2); eukaryotic translation initiation factor 5 (EIF5); eukaryotic translation termination factor 1 (ETF1); EV12 protein; Ewing sarcoma breakpoint region 1 (EWSR1); EWS/FLI1 activated transcript 2 homolog (EAT-2); EWS-E1A-F chimeric protein; excision repair cross-complementing rodent repair deficiency, complementation group 1 (includes overlapping antisense sequence) (ERCC1); excision repair cross-complementing rodent repair deficiency,

complementation group 5 (xeroderma pigmentosum, complementation group G (Cockayne syndrome)) (ERCC5); exostoses (multiple)-like 3 (EXTL3); F11; F1-ATPase beta subunit (F-1 beta); Fanconi anaemia group A; Fanconi anemia, complementation group A (FANCA); far upstream element (FUSE) binding protein 1 (FUBP1); farnesyl diphosphate synthase (farnesyl pyrophosphate synthetase, dimethylallyltransferase, geranyltransferase) (FDPS); farnesyl-diphosphate farnesyltransferase 1 (FDFT1); farnesyltransferase, CAAX box, beta (FNTB); Fas-ligand associated factor 1; fatty-acid-Coenzyme A ligase, long-chain 1 (FACL1); Fc fragment of IgA, receptor for (FCAR); Fc fragment of IgE, high affinity I, receptor for; gamma polypeptide (FCER1G); Fc fragment of IgE, low affinity II, receptor for (CD23A) (FCER2); Fc fragment of IgG, low affinity IIa, receptor for (CD32); Fc fragment of IgG, low affinity IIa, receptor for (CD32) (FCGR2A); Fc fragment of IgG, low affinity IIIa, receptor for (CD16) (FCGR3A); Fc fragment of IgG, receptor, transporter, alpha (FCGRT); fc-fgr; Fc-gamma-receptorIIIB (FCGR3B); feline sarcoma (Snyder-Theilen) viral (v-fes)/Fujinami avian sarcoma (PRCII) viral (v-fps) oncogene homolog(FES) c-fes/fps); female sterile homeotic-related gene 1 (mouse homolog) (FSRG1); ferritin L-chain; ferritin, heavy polypeptide 1 (FTH1); fetal Alzheimer antigen (FALZ); fetal Ig heavy chain variable region; fibrillarin (FBL); fibrinogen-like protein 2 (T49); ficolin (collagen/fibrinogen domain-containing) 1 (FCN1); filamin A, alpha (actin-binding protein-280) (FLNA); filamin B, beta (actin-binding protein-278) (FLNB); Finkel-Biskis-Reilly murine sarcoma virus (FBR-MuSV) ubiquitously expressed (fox derived); ribosomal protein S30 (FAU); FK-506 binding protein; FK506-binding protein 1A (12kD) (FKBP1A); FK506-binding protein 1B (12.6 kD) (FKBP1B); FK506-binding protein 5 (FKBP5); Flightless I (Drosophila) homolog (FLII); FLN29 (FLN29); flotillin 2 (FLOT2); folate receptor 2 (fetal) (FOLR2); forkhead (Drosophila) homolog (rhabdomyosarcoma) like 1 (FKHRL1); Formyl peptide receptor 1 (FPR1); formyl peptide receptor-like 1 (FPRL1); fragile X mental retardation 1 (FMR1); fragile X mental retardation, autosomal homolog 1 (FXR1); Friend leukemia virus integration 1 (FLI1); fructose-bisphosphatase 1 (FBP1); FSHD-associated repeat DNA, proximal region; fucose-1-phosphate guanylyltransferase (FPGT); full length insert cDNA clone ZA78A09; full length insert cDNA YP07G10; fumarate hydratase (FH); FYN-binding protein (FYB-120/130) (FYB); G protein beta subunit-like protein 12.3; G protein-coupled receptor kinase 6 (GPRK6); G1 to S phase transition 1 (GSPT1); GA-binding protein transcription factor, beta subunit 2 (47kD) (GABPB2); galactose-1-phosphate uridylyltransferase

(GALT); galactosidase, beta 1 (GLB1); galectin-9 isoform; gamma2-adaptin (G2AD); gamma-actin; gamma-aminobutyric acid (GABA) B receptor 1 (GABBR1); GATA-binding protein 2 (GATA2); GATA-binding protein 3 (GATA3); GCN5 (general control of amino-acid synthesis, yeast, homolog)-like 1 (GCN5L1); GDP dissociation inhibitor 1 (GDI1); GDP dissociation inhibitor 2 (GDI2); GDS-related protein (HKE1.5); gelsolin (amyloidosis, Finnish type) (GSN); general transcription factor II, I (GTF2I); general transcription factor II, i, pseudogene 1 (GTF2IP1); general transcription factor IIF, polypeptide 1 (74kD subunit) (GTF2F1); general transcription factor IIH, polypeptide 3 (34kD subunit) (GTF2H3); general transcription factor IIH, polypeptide 4 (52kD subunit) (GTF2H4); general transcription factor IIIA (GTF3A); general transcription factor IIIC, polypeptide 1 (alpha subunit, 220kD ) (GTF3C1); general transcription factor IIIC, polypeptide 2 (beta subunit, 110kD) (GTF3C2); germline immunoglobulin heavy chain (IGHV@); germline immunoglobulin heavy chain, variable region; germline immunoglobulin heavy chain, variable region, (21-2); GLE1 (yeast homolog)-like, RNA export mediator (GLE1L); glia maturation factor, beta (GMFB); glioma-associated oncogene homolog (zinc finger protein) (GLI); globin, alpha 2; glucocorticoid receptor (GRL); glucosyl phosphate isomerase (CONTAINS LARGE REPEAT); glucosamine (N-acetyl)-6-sulfatase (Sanfilippo disease IIID) (GNS); glucose transporter-like protein-III (GLUT3); glucosidase, alpha; acid (Pompe disease, glycogen storage disease type II) (GAA); glucosidase, beta; acid (includes glucosylceramidase) (GBA); glutamate dehydrogenase 1 (GLUD1); glutamate-ammonia ligase (glutamine synthase) (GLUL); glutamate-cysteine ligase (gamma-glutamylcysteine synthetase), catalytic (72.8kD) (GLCLC); glutamine cyclotransferase; glutamine-fructose-6-phosphate transaminase 1 (GFPT1); glutaminyl-tRNA synthetase; glutaminyl-tRNA synthetase (QARS); glutamyl-prolyl-tRNA synthetase (EPRS); glutathione peroxidase 1 (GPX1); glutathione peroxidase 4 (phospholipid hydroperoxidase) (GPX4); glutathione S-transferase pi (GSTP1); glutathione S-transferase subunit 13 homolog; glyceraldehyde-3-phosphate dehydrogenase (GAPD); glycogenin (GYG); glycophorin C (Gerbich blood group) (GYPC); glycoprotein M6B (GPM6B); glycyl-tRNA synthetase (GARS); glyoxalase I (lactoyl glutathione lyase) (GLYI); golgi autoantigen, golgin subfamily a, 1 (GOLGA1); golgi autoantigen, golgin subfamily a, 4 (GOLGA4); golgi autoantigen, golgin subfamily b, macrogolgin (with transmembrane signal), 1 (GOLGB1); gp25L2 protein; grancalcin; granulin (GRN); Granulysin (NKG5); granzyme A (granzyme 1, cytotoxic T-

lymphocyte-associated serine esterase 3) (GZMA); GRB2-related adaptor protein (GRAP); Grb2-related adaptor protein 2 (GRAP2); GRO1 oncogene (melanoma growth stimulating activity, alpha) (GRO1); growth arrest and DNA-damage-inducible gene (GADD153); growth arrest-specific 7 (GAS7); growth factor receptor-bound protein 2 (GRB2); GS1 (protein of unknown function); GS3955; GTP binding protein 1 (GTPBP1); GTPase activating protein-like (GAPL); Gu protein (GURDB); guanine nucleotide binding protein (G protein), alpha inhibiting activity polypeptide 2 (GNAI2); guanine nucleotide binding protein (G protein), alpha inhibiting activity polypeptide 3 (GNAI3); guanine nucleotide binding protein (G protein), alpha stimulating activity polypeptide 1 (GNAS1); guanine nucleotide binding protein (G protein), alpha transducing activity polypeptide 2 (GNAT2); guanine nucleotide binding protein (G protein), beta 5 (GNB5); guanine nucleotide binding protein (G protein), beta polypeptide 1 (GNB1); guanine nucleotide binding protein (G protein), q polypeptide (GNAQ); guanine nucleotide binding protein-like 1 (GNL1); guanine nucleotide exchange factor; guanine nucleotide regulatory factor (LFP40); GUANINE-MONOPHOSPHATE SYNTHETASE (GMPS); guanosine-diphosphatase like protein; guanylate binding protein 1, interferon-inducible, 67kD (GBP1); guanylate binding protein 2, interferon-inducible (GBP2); H2A histone family, member C (H2AFC); H2A histone family, member Y (H2AY); H2B histone family, member L (H2BFL); h2-calponin; H-2K binding factor-2; H3 histone family, member K (H3FK); H3 histone, family 3A (H3F3A); H3 histone, family 3B (H3.3B) (H3F3B); hbc647; heat shock 27kD protein 1 (HSPB1); heat shock 40kD protein 1 (HSPF1); heat shock 60kD protein 1 (chaperonin) (HSPD1); heat shock 70kD protein 1 (HSPA1A); heat shock 70kD protein 5 (glucose-regulated protein, 78kD) (HSPA5); heat shock 70kD protein 6 (HSP70B') (HSPA6); heat shock 70kD protein 9B (mortalin-2) (HSPA9B); heat shock factor binding protein 1 (HSBP1); heat shock protein 90; heat shock protein, DNAJ-like 2 (HSJ2); Hect (homologous to the E6-AP (UBE3A) carboxyl terminus) domain and RCC1 (CHC1)-like domain (RLD) 1 (HERC1); hect domain and RLD 2 (HERC2); helicase-like protein (HLP); helix-loop-helix protein HE47 (E2A); hematopoietic cell-specific Lyn substrate 1 (HCLS1); heme oxygenase (decycling) 1 (HMOX1); hemoglobin beta (beta globin); hemoglobin, alpha 1 (HBA1); hemoglobin, beta (HBB); emokine (C-X-C motif), receptor 4 (fusin) (CXCR4); hemopoietic cell kinase (HCK); hepatitis C-associated microtubular aggregate protein p44; hepatoma-derived growth factor; Hermansky-Pudlak syndrome (HPS); heterogeneous nuclear ribonucleoprotein

(C1/C2) (HNRPC); heterogeneous nuclear ribonucleoprotein A/B (HNRPAB); heterogeneous nuclear ribonucleoprotein A1 (HNRPA1); heterogeneous nuclear ribonucleoprotein A2/B1 (HNRPA2B1); heterogeneous nuclear ribonucleoprotein D (hnRNP D); heterogeneous nuclear ribonucleoprotein D-like (HNRPDL); heterogeneous nuclear ribonucleoprotein F (HNRPF); heterogeneous nuclear ribonucleoprotein G (HNRPG); heterogeneous nuclear ribonucleoprotein H1 (H) (HNRPH1); heterogeneous nuclear ribonucleoprotein K (HNRPK); heterogeneous nuclear ribonucleoprotein R (HNRPR); heterogeneous nuclear ribonucleoprotein U (scaffold attachment factor A) (HNRPU); hexokinase 1 (HK1); hexokinase 2 (HK2); hexokinase 3 (HK3); hexosaminidase A (alpha polypeptide) (HEXA; HGMP07I gene for olfactory receptor; High density lipoprotein binding protein (HDLBP); high-mobility group (nonhistone chromosomal) protein 1 (HMG1); High-mobility group (nonhistone chromosomal) protein 17 (HMG17); high-mobility group (nonhistone chromosomal) protein 2 (HMG2); high-mobility group (nonhistone chromosomal) protein isoforms I and Y; histidine ammonia-lyase (HAL); histidyl-tRNA synthetase (HARS); histocompatibility antigen (HLA-Cw3), class I; histone deacetylase 1 (HDAC); histone deacetylase 1 (HDAC1); histone deacetylase 5 (NY-CO-9); HK2 gene for hexokinase II; HL9 monocyte inhibitory receptor precursor; HLA class I heavy chain (HLA-Cw\*1701); HLA class I locus C heavy chain; HLA class II SB 4-beta chain; HLA class III region containing NOTCH4 gene; HLA-A; HLA-A\*7402; HLA-A11; HLA-B; HLA-B associated transcript-1 (D6S81E); HLA-B associated transcript-2 (D6S51E); HLA-B\*1529; HLA-Bw72 antigen; HLA-C gene (HLA-Cw\*0701 allele); HLA-Cw\*0701; HLA-Cw\*0801; HLA-Cw\*1203; HLA-DR alpha-chain; HLA-F (leukocyte antigen F); HMG box containing protein 1; Hmob33; HMT1 (hnRNP methyltransferase, *S. cerevisiae*)-like 1 (HRMT1L1); homeodomain-interacting protein kinase 3 (HIPK3); homolog of *Drosophila* past (PAST); homolog of yeast (*S. cerevisiae*) ufd2 (UFD2); HPV16 E1 protein binding protein; HRIHFB2157; hsc70 gene for 71 kd heat shock cognate protein; HSPC012; HSPC021; HsPex13p; htra2-beta-2; HU-K4; hunc18b2; HUNKI; huntingtin-interacting protein HYPA/FBP11 (HYPA); hVps41p (HVPS41); hydroxyacyl-Coenzyme A dehydrogenase/3-ketoacyl-Coenzyme A thiolase/enoyl-Coenzyme A hydratase (trifunctional protein), alpha subunit (HADHA); hydroxyacyl-Coenzyme A dehydrogenase/3-ketoacyl-Coenzyme A thiolase/enoyl-Coenzyme A hydratase (trifunctional protein), beta subunit (HADHB); hydroxysteroid (17-beta) dehydrogenase 1 (HSD17B1); hypoxia-inducible factor 1, alpha

subunit (basic helix-loop-helix transcription factor) (HIF1A); Ia-associated invariant gamma-chain (clones lambda-y (1,2,3)); iduronate 2-sulfatase (Hunter syndrome) (IDS); Ig heavy chain variable region; Ig heavy chain variable region (VH4DJ) (clone T14.4); Ig heavy chain variable region (VH4DJ) (clone T22.18); Ig J chain; Ig kappa; IG kappa light chain variable region A20; Ig lambda light chain variable region (26-34ITIIIF120); Ig mu-chain VDJ4-region; Ig rearranged anti-myelin kappa-chain (V-J4-region, hybridoma AE6-5); Ig rearranged H-chain mRNA V-region; IgG Fc binding protein (FC(GAMMA)BP); IgG heavy chain variable region (vH26); IgM heavy chain (C mu, membrane exons); Ikb kinase-beta (IKK-beta); IL-1 receptor type II; IL2-inducible T-cell kinase (ITK); immediate early protein (ETR101); immunoglobulin light chain (lambda); Immunoglobulin (CD79A) binding protein 1 (IGBP1); immunoglobulin G Fc receptor IIIB; immunoglobulin gamma 3 (Gm marker) (IGHG3); immunoglobulin heavy chain (VI-3B); immunoglobulin heavy chain J region; immunoglobulin heavy chain J region, B1 haplotype; immunoglobulin heavy chain variable region (IGH) (clone 21u-48); immunoglobulin heavy chain variable region (IGH) (clone 23u-1); immunoglobulin heavy chain variable region V3-43 (IGHV@); immunoglobulin heavy chain variable region V3-7 (IGHV@); immunoglobulin IgH heavy chain Fd fragment; immunoglobulin kappa light chain; immunoglobulin kappa light chain V-segment A27; immunoglobulin light chain; immunoglobulin light chain variable region (lambda IIIb subgroup) from IgM rheumatoid factor; immunoglobulin M heavy chain V region=anti-lipid A antibody; immunoglobulin mu (IGHM); immunoglobulin mu binding protein 2 (IGHMBP2); immunoglobulin superfamily, member 2 (IGSF2); imogen 38 (IMOGEN38); IMP (inosine monophosphate) dehydrogenase 1 (IMPDH1); IMP (inosine monophosphate) dehydrogenase 2 (IMPDH2); inc finger protein 151 (pHZ-67) (ZNF151); inc finger protein, C2H2, rapidly turned over (ZNF20); inducible poly(A)-binding protein (IPABP); inducible protein (Hs.80313); inhibitor of DNA binding 2, dominant negative helix-loop-helix protein (ID2); inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase complex-associated protein (IKBKAP); inositol 1,3,4-trisphosphate 5/6-kinase; inositol 1,4,5 trisphosphate receptor type 1 (ITPR1); inositol 1,4,5-trisphosphate 3-kinase B (ITPKB); inositol monophosphatase; inositol polyphosphate-5-phosphatase, 145kD (INPP5D); Ins(1,3,4,5)P4-binding protein; insulin (INS); insulin-like growth factor 2 receptor (IGF2R); integral membrane protein 1 (ITM1); integral membrane protein 2C (ITM2C); integral membrane protein Tmp21-I (p23); integrin beta 4 binding protein (ITGB4BP); integrin, alpha 2b

(platelet glycoprotein IIb of IIb/IIIa complex, antigen CD41B) (ITGA2B); integrin, alpha 5 (fibronectin receptor, alpha polypeptide) (ITGA5); integrin, alpha L (antigen CD11A (p180), lymphocyte function-associated antigen 1; alpha polypeptide) (ITGAL); integrin, alpha M (complement component receptor 3, alpha; also known as CD11b (p170), macrophage antigen alpha polypeptide) (ITGAM); integrin, alpha X (antigen CD11C (p150), alpha polypeptide) (ITGAX); integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2 MSK12) (ITGB1); integrin, beta 2 (antigen CD18 (p95), lymphocyte function-associated antigen 1; macrophage antigen 1 (mac-1) beta subunit) (ITGB2); integrin, beta 7 (ITGB7); Integrin-linked kinase (ILK); intercellular adhesion molecule 1 (CD54), human rhinovirus receptor (ICAM1); intercellular adhesion molecule 2 (ICAM2); intercellular adhesion molecule 3 (ICAM3); intercellular adhesion molecule 4, Landsteiner-Wiener blood group (ICAM4); Interferon consensus sequence binding protein 1 (ICSBP1); interferon regulatory factor 2 (IRF2); interferon regulatory factor 1 (IRF1); interferon regulatory factor 5 (IRF5); interferon, gamma-inducible protein 16 (IFI16); interferon, gamma-inducible protein 30 (IFI30); interferon-induced protein 17 (IFI17); interferon-induced protein 54 (IFI54); interferon-inducible (1-8D); interferon-inducible (1-8U); interferon-related developmental regulator 1 (IFRD1); interferon-stimulated transcription factor 3, gamma (48kD) (ISGF3G); interleukin 1 receptor, type II (IL1R2); Interleukin 10 receptor, beta (IL10RB); interleukin 12 receptor, beta 1 (IL12RB1); interleukin 13 receptor, alpha 1 (IL13RA1); interleukin 16 (lymphocyte chemoattractant factor) (IL16); interleukin 18 receptor 1 (IL18R1); interleukin 2 receptor, beta (IL2RB); interleukin 2 receptor, gamma (severe combined immunodeficiency) (IL2RG); interleukin 4 receptor (IL4R); interleukin 6 receptor (IL6R); interleukin 6 signal transducer (gp130, oncostatin M receptor) (IL6ST); interleukin 7 receptor (IL7R); interleukin 8 (IL8); interleukin 8 receptor alpha (IL8RA); interleukin 8 receptor, beta (IL8RB); interleukin enhancer binding factor 2, 45kD (ILF2); interleukin enhancer binding factor 3, 90kD (ILF3); interleukin-1 receptor-associated kinase 1 (IRAK1); interleukin-10 receptor, alpha (IL10RA); interleukin-11 receptor, alpha (IL11RA); intestinal carboxylesterase; IQ motif containing GTPase activating protein 1 (IQGAP1); IQ motif containing GTPase activating protein 2 (IQGAP2); isocitrate dehydrogenase 1 (NADP+), soluble (IDH1); isocitrate dehydrogenase 2 (NADP+), mitochondrial (IDH2); isocitrate dehydrogenase 3 (NAD+) alpha (IDH3A); isocitrate dehydrogenase 3 (NAD+) gamma (IDH3G); isolate TzCCR5-179 CCR5 receptor (CCR5); isopentenyl-diphosphate delta isomerase (IDI1); Janus kinase 1 (a



protein tyrosine kinase) (JAK1); Janus kinase 2 (a protein tyrosine kinase) (JAK2); Jk-recombination signal binding protein (RBPJK); JM1 protein; jumonji (mouse) homolog (JMJ); jun D proto-oncogene (JUND); jun dimerization protein; junction plakoglobin (JUP); kangai 1 (suppression of tumorigenicity 6, prostate; CD82 antigen (R2 leukocyte antigen, antigen detected by monoclonal and antibody IA4)) (KAI1); karyopherin (importin) beta 1 (KPNB1); karyopherin (importin) beta 2 (KPNB2); karyopherin alpha 1 (importin alpha 5) (KPNA1); karyopherin alpha 2 (RAG cohort 1, importin alpha 1) (DPNA2); karyopherin alpha 3 (importin alpha 4) (KPNA3); karyopherin alpha 4 (KPNA4); Katanin (80 kDa) (KAT); KE03 protein; Keratin 8 (KRT8); ketohexokinase (fructokinase) (KHK); KIAA0002 (KIAA0002); KIAA0005 (KIAA0005); KIAA0010 (KIAA0010); KIAA0016 (KIAA0016); KIAA0017 (KIAA0017); KIAA0022 (KIAA0022); KIAA0023 (KIAA0023); KIAA0024 (KIAA0024); KIAA0025 (KIAA0025); KIAA0026 (KIAA0026); KIAA0027; KIAA0032 (KIAA0032); KIAA0040 (KIAA0040); KIAA0050 (KIAA0050); KIAA0053 (KIAA0053); KIAA0057 (KIAA0057); KIAA0058 (KIAA0058); KIAA0063 (KIAA0063); KIAA0064 (KIAA0064); KIAA0066; KIAA0068; KIAA0073; KIAA0081; KIAA0084; KIAA0085; KIAA0088; KIAA0090; KIAA0092 (KIAA0092); KIAA0094; KIAA0095 (KIAA0095); KIAA0096; KIAA0097 (KIAA0097); KIAA0099 (KIAA0099); KIAA0102 (KIAA0102); KIAA0105; KIAA0121 (KIAA0121); KIAA0123; KIAA0128; KIAA0129 (KIAA0129); KIAA0130 (KIAA0130); KIAA0136; KIAA0137 (KIAA0137); KIAA0140 (KIAA0140); KIAA0141 (KIAA0141); KIAA0144 (KIAA0144); KIAA0146; KIAA0148 (KIAA0148); KIAA0154; KIAA0156; KIAA0160; KIAA0161 (KIAA0161); KIAA0164 (KIAA0164); KIAA0167 (KIAA0167); KIAA0168 (KIAA0168); KIAA0169; KIAA0171 (KIAA0171); KIAA0174 (KIAA0174); KIAA0179; KIAA0181; KIAA0183; KIAA0184; KIAA0193 (KIAA0193); KIAA0200 (KIAA0200); KIAA0210 (KIAA0210); KIAA0217; KIAA0219; KIAA0222 (KIAA0222); KIAA0223; KIAA0229; KIAA0232 (KIAA0232); KIAA0233 (KIAA0233); KIAA0235; KIAA0239; KIAA0240; KIAA0242; KIAA0248; KIAA0249 (KIAA0249); KIAA0253; KIAA0254 (KIAA0254); KIAA0255(KIAA0255); KIAA0262 (KIAA0262); KIAA0263 (KIAA0263); KIAA0264; KIAA0268; KIAA0275 (KIAA0275); KIAA0304 (KIAA0304); KIAA0308; KIAA0310 (KIAA0310); KIAA0315 (KIAA0315); KIAA0329 (KIAA0329); KIAA0330; KIAA0332; KIAA0333; KIAA0336 (KIAA0336); KIAA0342 (KIAA0342); KIAA0344 (KIAA0344); KIAA0354 (KIAA0354); KIAA0365 (KIAA0365); KIAA0370; KIAA0372

(KIAA0372); KIAA0373 (KIAA0373); KIAA0375 (KIAA0375); KIAA0377 (KIAA0377); KIAA0379; KIAA0380 (KIAA0380); KIAA0382 (KIAA0382); KIAA0383; KIAA0386 (KIAA0386); KIAA0392; KIAA0397 (KIAA0397); KIAA0403; KIAA0404; KIAA0409; KIAA0421; KIAA0428 (KIAA0428); KIAA0429 (KIAA0429); KIAA0430 (KIAA0430); KIAA0432 (KIAA0432); KIAA0435 (KIAA0435); KIAA0438 (KIAA0438); KIAA0447 (KIAA0447); KIAA0449; KIAA0456; KIAA0458 (KIAA0458); KIAA0462; KIAA0465; KIAA0476 (KIAA0476); KIAA0489; KIAA0494 (KIAA0494); KIAA0515; KIAA0521; KIAA0525; KIAA0530; KIAA0532; KIAA0537 (KIAA0537); KIAA0540; KIAA0543; KIAA0544; KIAA0549; KIAA0551; KIAA0554; KIAA0561; KIAA0562 (KIAA0562); KIAA0563 (KIAA0563); KIAA0569 (KIAA0569); KIAA0571 (KIAA0571); KIAA0573; KIAA0576; KIAA0580; KIAA0584; KIAA0592; KIAA0596; KIAA0598 (KIAA0598); KIAA0608; KIAA0614; KIAA0615 (KIAA0615); KIAA0621; KIAA0648; KIAA0652 (KIAA0652); KIAA0668; KIAA0669; KIAA0671 (KIAA0671); KIAA0675 (KIAA0675); KIAA0676; KIAA0677 (KIAA0677); KIAA0678; KIAA0679; KIAA0680 (KIAA0680); KIAA0692; KIAA0697; KIAA0699; KIAA0700; KIAA0737 (KIAA0737); KIAA0748 (KIAA0748); KIAA0763 (KIAA0763); KIAA0769 (KIAA0769); KIAA0782; KIAA0796; KIAA0798 (KIAA0798); KIAA0823; KIAA0854; KIAA0856; KIAA0860; KIAA0862; KIAA0873; KIAA0892; KIAA0906; KIAA0991; killer cell lectin-like receptor subfamily B, member 1 (KLRB1); killer cell lectin-like receptor subfamily C, member 4 (KLRC4); kinectin 1 (kinesin receptor) (KTN1); kinesin family member 5B (KIF5B); kinesin-like DNA binding protein; Kruppel related gene (clone pHKR1RS); Kruppel-like zinc finger protein Zf9; kruppel-type zinc finger protein, ZK1; L apoferritin; lactate dehydrogenase A (LDHA); lactate dehydrogenase B (LDHB); lactotransferrin (LTF); laminin receptor 1 (67kD); Ribosomal protein SA (LAMR1); laminin receptor homolog {3' region}; laminin, gamma 1 (formerly LAMB2) (LAMC1); latent transforming growth factor beta binding protein 1 (LTBP1); LDLC; lectin, galactoside-binding, soluble, 2 (galectin 2) (LGALS2); lectin, galactoside-binding, soluble, 3 binding protein (galectin 6 binding protein) (LGALS3BP); leucine rich repeat (in FLII) interacting protein 1 (LRRFIP1); leucocyte immunoglobulin-like receptor-5 (LIR-5); leucocyte immunoglobulin-like receptor-6a (LIR-6); leucocyte immunoglobulin-like receptor-7 (LIR-7); leukemia virus receptor 1 (GLVR1); leukocyte adhesion protein p150,95 alpha subunit; leukocyte antigen, HLA-A2; leukocyte immunoglobulin-like receptor (MIR-10); leukocyte

tyrosine kinase (LTK); leukocyte-associated Ig-like receptor 1 (LIAR1); leukotriene A4 hydrolase (LTA4H); leupaxin (LDPL); ligase I, DNA, ATP-dependent (LIG1); LIM and SH3 protein 1 (LASP1); LIM domain kinase 2 (LIMK2); Line-1 repeat mRNA with 2 open reading frames; Line-1 repeat with 2 open reading frames; lipase A, lysosomal acid, cholesterol esterase (Wolman disease) (LIPA); lipase, hormone-sensitive (LIPE); LMP7; Lon protease-like protein (LONP); low density lipoprotein-related protein 1 (alpha-2-macroglobulin receptor) (LRP1); low density lipoprotein-related protein-associated protein 1 (alpha-2-macroglobulin receptor-associated protein 1) (LRPAP1); low-affinity Fc-gamma receptor IIA; LPS-induced TNF-alpha factor (PIG7); Lst-1; L-type amino acid transporter subunit LAT1; lung resistance-related protein (LRP); Lymphocyte antigen 75 (LY75); lymphocyte antigen 9 (LY9); lymphocyte antigen HLA-B\*4402 and HLA-B\*5101; lymphocyte cytosolic protein 1 (L-plastin) (LCP1); lymphocyte cytosolic protein 2 (SH2 domain-containing leukocyte protein of 76kD) (LCP2); lymphocyte glycoprotein T1/Leu-1; lymphocyte-specific protein 1 (LSP1); lymphocyte-specific protein tyrosine kinase (LCK); lymphoid phosphatase LyP1; lymphoid-restricted membrane protein (LRMP); lymphoid-specific SP100 homolog (LYSP100-A); lymphoma proprotein convertase (LPC); lysosomal-associated membrane protein 1 (LAMP1); Lysosomal-associated membrane protein 2 (LAMP2); lysozyme (renal amyloidosis) (LYZ); lysyl-tRNA synthetase (KARS); M phase phosphoprotein 10 (U3 small nucleolar ribonucleoprotein) (MPP-10); M1-type and M2-type pyruvate kinase; m6A methyltransferase (MT-A70); mab-21 (C. elegans)-like 1 (MAB21L1); MacMarcks; macrophage-associated antigen (MM130); MADS box transcription enhancer factor 2, polypeptide A (myocyte enhancer factor 2A) (MEF2A); MADS box transcription enhancer factor 2, polypeptide C (myocyte enhancer factor 2C) (MEF2C); major histocompatibility complex class I beta chain (HLA-B); major histocompatibility complex, class I, A (HLA-A); major histocompatibility complex, class I, C (HAL-C); major histocompatibility complex, class I, E (HLA-E); major histocompatibility complex, class II, DM BETA (HLA-DMB); major histocompatibility complex, class II, DP beta 1 (HLA-DPB1); major histocompatibility complex, class II, DR beta 1 (HLA-DRB1); Major histocompatibility complex, class II, Y box-binding protein I; DNA-binding protein B (YB1); malate dehydrogenase 1, NAD (soluble) (mdh1); malate dehydrogenase 1, NAD (soluble) (MDH1); malonyl-CoA decarboxylase precursor; maltase-glucoamylase (mg); manic fringe (Drosophila) homolog (MFNG); mannose phosphate isomerase (MPI); mannose phosphate isomerase (mpi);

mannose-6-phosphate receptor (cation dependent) (M6PR); mannose-P-dolichol utilization defect 1 (MPDU1); mannosidase, alpha B, lysosomal (MANB); mannosyl (alpha-1,3)-glycoprotein beta-1,2-N-acetylglucosaminyltransferase (MGAT1); map 4q35 repeat region; MAP kinase-interacting serine/threonine kinase 1 (MKNK1); MAP/ERK kinase kinase 3 (MEKK3); MAP/ERK kinase kinase 5 (MEKK5); MAP/microtubule affinity-regulating kinase 3 (MARK3); Marenstrin protein; MASL1; MAX dimerization protein (MAD); MaxiK potassium channel beta subunit; MBP-2 for MHC binding protein 2; Meis (mouse) homolog 3 (MEIS3); melanoma-associated antigen p97 (melanotransferrin); membrane cofactor protein (CD46, trophoblast-lymphocyte cross-reactive antigen) (MCP); membrane component, chromosome 17, surface marker 2 (ovarian carcinoma antigen CA125) (M17S2); membrane metallo-endopeptidase (neutral endopeptidase, enkephalinase, CALLA, CD10) (MME); membrane protein, palmitoylated 1 (55kD) (MPP1); meningioma expressed antigen (MGEA); meningioma-expressed antigen 11 (MEA11); Menkes Disease (ATP7A) putative  $\text{Cu}^{++}$ -transporting P-type ATPase; metallothionein 2A (MT2A); metaxin 1 (MTX1); methionine adenosyltransferase II, alpha (MAT2A); methylene tetrahydrofolate dehydrogenase ( $\text{NAD}^{+}$  dependent), methenyltetrahydrofolate cyclohydrolase (MTHFD2); methylenetetrahydrofolate dehydrogenase ( $\text{NADP}^{+}$  dependent), methenyltetrahydrofolate cyclohydrolase, formyltetrahydrofolate synthetase (MTHFD1); methyltransferase, putative; MHC class I region; MHC class I antigen (HLA-A2); MHC class I antigen (HLA-A33); MHC class I antigen (HLA-C); MHC class I antigen B\*5801 (HLA-B); MHC class I antigen HLA-A (HLA-A); MHC class I antigen HLA-A (HLA-A-2402 allele); MHC class I antigen HLA-A11K; MHC class I antigen HLA-B (B\*48 allele); MHC class I antigen HLA-B (HLA-B\*1502 allele); MHC class I antigen HLA-B (HLA-B\*40MD); MHC class I antigen HLA-B (HLA-B\*4103 allele); MHC class I antigen HLA-B gene (HLA-B\*4402 variant allele); MHC class I antigen HLA-B GN00110-B\*3910; MHC class I antigen HLA-Cw\*04011; MHC class I antigen R69772 HLA-A (A\*0302); MHC class I antigen SHCHA (HLA-B\*4403 variant); MHC class I histocompatibility antigen (HLA-B) (clone C21/14); MHC class I HLA B71; MHC class I HLA-A (Aw33.1); MHC class I HLA-B; MHC class I HLA-B (HLA-B-08NR allele); MHC class I HLA-B\*3512; MHC class I HLA-B44.2 chain; MHC class I HLA-B51-cd3.3; MHC class I HLA-C allele; MHC class I HLA-Cw\*0803; MHC class I HLA-Cw6; MHC class I lymphocyte antigen A2 (A2.1) variant DK1; MHC class I mic-B antigen; MHC class I polypeptide-related sequence A (MICA); MHC class II

DNA Sequence (clone A37G7-1C11); MHC class II DQ-alpha associated with DRw6, DQw1 protein; MHC class II DQ-beta associated with DR2, DQw1 protein; MHC class II HAL-DQ-LTR5 (DQ,w8) DNA fragment, long terminal repeat region; MHC class II HLA-DRB1; MHC class II HLA-DRw11-beta-I chain (DRw11.3); MHC class II lymphocyte antigen (DPw4-beta-1); MHC microsomal stress 70 protein ATPase core (stch); microtubule-associated protein 4 (MAP4); microtubule-associated protein 7 (MAP7); mineralocorticoid receptor (aldosterone receptor) (MLR); minichromosome maintenance deficient (*S. cerevisiae*) 3 (MCM31); minichromosome maintenance deficient (*S. cerevisiae*) 3-associated protein (MCM3AP); minichromosome maintenance deficient (*S. cerevisiae*) 5 (cell division cycle 46) (MCM5); mitochondrial 16S rRNA; mitochondrial ATP synthase (F1-ATPase) alpha subunit; mitochondrial ATP synthase c subunit (P1 form); mitochondrial cytochrome b small subunit of complex II; mitochondrial DNA loop attachment sequences (clone LAS34); mitochondrial DNA polymerase accessory subunit precursor (MtPolB) nuclear gene encoding mitochondrial protein;; mitochondrial DNA, complete genome; mitochondrial inner membrane preprotein translocase Tim17a; mitochondrial loop attachment sequence (clone LAS88); mitochondrial NADH dehydrogenase subunit 2 (ND2); mitochondrial translational initiation factor 2 (MTIF2); mitochondrion cytochrome b; mitogen inducible gene mig-2; mitogen-activated protein kinase-activated protein kinase 3 (MAPKAPK3); MLN51; moesin (MSN); monocytic leukaemia zinc finger protein (MOZ); MOP1 (); motor protein (Hs.78504); mouse double minute 2, human homolog of; p53-binding protein (MDM2); M-phase phosphoprotein 6 (MPP-6); M-phase phosphoprotein, mpp11; MPS1; Mr 110,000 antigen; mu-adaptin-related protein-2; mu subunit of AP-4 (MU-ARP2); murine leukemia viral (bmi-1) oncogene homolog (BMI1); mutant (Daudi) beta2 - microglobulin; mutated in colorectal cancers (MCC); myeloid cell leukemia sequence 1 (BCL2-related) (MCL1); myeloid cell nuclear differentiation antigen (MNDA); myeloid differentiation primary response gene (88) (MYD88); myeloid leukemia factor 2 (MLF2); myeloid/lymphoid or mixed-lineage leukemia (trithorax (*Drosophila*) homolog); translocated to, 7 (MLLT7); MYH9 (cellular myosin heavy chain); myomesin (M-protein) 2 (165kD) (MYOM2); myosin IE (MYO1E); myosin light chain kinase (MLCK); myosin phosphatase, target subunit 1 (MYPT1); myosin, heavy polypeptide 9, non-muscle (MYH9); myosin, light polypeptide, regulatory, non-sarcomeric (20kD) (MLCB); myosin-I beta; myristoylated alanine-rich protein kinase C substrate (MARCKS, 80K-L) (MACS); myxovirus

(influenza) resistance 1, homolog of murine (interferon-inducible protein p78) (MX1); myxovirus (influenza) resistance 2, homolog of murine (MX2); N-acetylgalactosaminidase, alpha- (NAGA); N-acetylglucosamine receptor 1 (thyroid) (NAGR1); NACP/alpha-synuclein; N-acylaminoacyl-peptide hydrolase (APEH); N-acylsphingosine amidohydrolase (acid ceramidase) (ASAH); NAD<sup>+</sup>-specific isocitrate dehydrogenase beta subunit precursor (encoding mitochondrial protein); NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 5 (13kD, B13) (NDUFA5); NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 5 (16kD, SGD) (NDUFB5); NADH dehydrogenase (ubiquinone) Fe-S protein 2 (49kD) (NADH-coenzyme Q reductase) (NDUFS2); NADH dehydrogenase (ubiquinone) flavoprotein 2 (24kD) (NDUFV2); NADH:ubiquinone dehydrogenase 51 kDa subunit (NDUFV1); Nardilysin (N-arginine dibasic convertase) (NRD1); nascent-polypeptide-associated complex alpha polypeptide (NACA); natural killer cell group 7 sequence (NKG7); natural killer cell transcript 4 (NK4); natural killer-associated transcript 3 (NKAT3); natural killer-associated transcript 5 (NKAT5); natural killer-tumor recognition sequence (NKTR); N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 2 (NDST2); Ndr protein kinase; Nedd-4-like ubiquitin-protein ligase WWP1; nel (chicken)-like 2 (NELL2); N-ethylmaleimide-sensitive factor attachment protein, alpha (NAPA); N-ethylmaleimide-sensitive factor attachment protein, gamma (NAPG); neural precursor cell expressed, developmentally down-regulated 5 (NEDD5); neural precursor cell expressed, developmentally down-regulated 8 (NEDD8); neuregulin 1 (NRG1); neuroblastoma RAS viral (v-ras) oncogene homolog (NRAS); Neurofibromin 2 (bilateral acoustic neuroma) (NF2); neuronal apoptosis inhibitory protein (NAIP); neuronal cell adhesion molecule (NRCAM); neuropathy target esterase (NTE); neurotrophic tyrosine kinase, receptor, type 1 (NTRK1); neutrophil cytosolic factor 4 (40kD); NG31; nibrin (NBS); NIK; Ninjurin 1; nerve injury-induced protein-1; Nmi; N-myristoyltransferase 1 (NMT1); No arches-like (zebrafish) zinc finger protein (NAR); non-histone chromosome protein 2 (*S. cerevisiae*)-like 1 (NHP2L1); non-muscle alpha-actinin; non-muscle myosin alkali light chain (Hs.77385); non-neuronal enolase (EC 4.2.1.11); non-receptor tyrosine phosphatase 1; normal keratinocyte subtraction library mRNA, clone H22a; notch group protein (N); novel protein; novel T-cell activation protein; N-sulfoglucosamine sulfohydrolase (sulfamidase) (SGSH); nsulin induced gene 1 (INSIG1); ntegrin, alpha 4 (antigen CD49D, alpha 4 subunit of VLA-4 receptor) (ITGA14); nterferon, gamma-inducible protein 16 (IFI16); nterleukin 1, beta (IL1RB); nuclear antigen H731-like

protein; nuclear antigen Sp100 (SP100); nuclear autoantigenic sperm protein (histone-binding) (NASP); Nuclear domain 10 protein (NDP52); Nuclear factor (erythroid-derived 2)-like 2 (NFE2L2); Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1 (p105) (NFKB1); nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha (NFKBIA); nuclear factor related to kappa B binding protein (NFRKB); nuclear mitotic apparatus protein 1 (NUMA1); nuclear receptor coactivator 2 (GRIP1); nuclear receptor coactivator 3 (AIB3); nuclear receptor coactivator 4 (ELE1); nuclear receptor interacting protein 1 (NRIP1); nuclear respiratory factor 1 (NRF1); nuclear RNA helicase, DECD variant of DEAD box family (DDXL); nuclear transcription factor Y, alpha (NFYA); nuclear transcription factor, X-box binding 1 (NFX1); nuclear transport factor 2 (placental protein 15) (PP15); nucleobindin 1 (NUCB1); nucleolar phosphoprotein p130 (P130); nucleolar protein (KKE/D repeat) (NOP56); nucleolar protein (MSP58); nucleolar protein 1 (120kD) (NOL1); nucleolar protein p40; nucleolin (NCL); nucleophosmin (nucleolar phosphoprotein B23, numatrin) (NPM1); nucleophosmin-retinoic acid receptor alpha fusion protein NPM-RAR long form; nucleoporin 153kD (NUP153); nucleoporin 98kD (NUP98); nucleosome assembly protein; nucleosome assembly protein 1-like 1 (NAP1L1); nucleosome assembly protein 1-like 4 (NAP1L4); nucleosome assembly protein, 5'UTR; olfactory receptor (OR7-141); oligodendrocyte myelin glycoprotein (OMG); O-linked N-acetylglucosamine (GlcNAc) transferase (UDP-N-acetylglucosamine:polypeptide-N-acetylglucosaminyl transferase) (OGT); ORF (Hs.77868); ORF1; MER37; origin recognition complex, subunit 2 (yeast homolog)-like (ORC2L); ornithine aminotransferase (gyrate atrophy) (OAT); ornithine decarboxylase (ODC); ornithine decarboxylase antizyme, ORF 1 and ORF 2; orphan receptor (Hs.100221); OS-9 precursor; ovel centrosomal protein RanBPM (RANBPM); over-expressed breast tumor protein; oviductal glycoprotein 1, 120kD (OVGP1); oxidase (cytochrome c) assembly 1-like (OXAIL); oxoglutarate dehydrogenase (lipoamide) (OGDH); oxysterol binding protein (OSBP); OZF; p21/Cdc42/Rac1-activated kinase 1 (yeast Ste20-related) (PAK1); p40; P47 LBC oncogene; p53-induced protein (PIG11); p62 nucleoporin; p63 mRNA for transmembrane protein; palmitoyl-protein thioesterase (ceroid-lipofuscinosis, neuronal 1, infantile; Haltia-Santavuori disease) (PPT); papillary renal cell carcinoma (translocation-associated) (PRCC); PAR protein; PAX3/forkhead transcription factor gene fusion; paxillin (PXN); PBK1 protein; PDZ domain protein (Drosophila inaD-like) (INALD); peptidase D (PEPD); peptidylprolyl isomerase A

(cyclophilin A) (PPIA); peptidylprolyl isomerase D (cyclophilin D) (PPID); peptidylprolyl isomerase E (cyclophilin E) (PPIE); perforin 1 (preforming protein) (PRF1); peroxisomal acyl-CoA thioesterase (PTE1); Peroxisomal acyl-coenzyme A oxidase; peroxisomal farnesylated protein (PXF); phorbol-12-myristate-13-acetate-induced protein (PMAIP1); Phosphate carrier, mitochondrial (PHC); phosphate cytidylyltransferase 1, choline, alpha isoform (PCYT1A); phosphatidylinositol 3-kinase delta catalytic subunit; phosphatidylinositol 4-kinase, catalytic, beta polypeptide (PIK4CB); phosphatidylinositol glycan, class H (PIGH); phosphatidylinositol transfer protein (PI-TPbeta); phosphatidylinositol transfer protein, membrane-associated (PITPNM); phosphatidylinositol-4-phosphate 5-kinase, type II, alpha (PIP5K2A); phosphatidylinositol-4-phosphate 5-kinase, type II, beta (PIP5K2B); phosphodiesterase 7A (PDE7A); phosphodiesterase IB (PDES1B); phosphoglucomutase 1 (PGM1); phosphogluconate dehydrogenase (PGD); phosphoglycerate kinase 1 (PGK1); phosphoglycerate mutase 1 (brain) (PGAM1); phosphoglycerate mutase 2 (muscle) (PGAM2); phosphoinositide-3-kinase, catalytic, alpha polypeptide (PIK3CA); phosphoinositide-3-kinase, catalytic, delta polypeptide (PIK3CD); phosphoinositide-3-kinase, catalytic, gamma polypeptide (PIK3CG); phospholipase C; phospholipase C, delta 1 (PLCD1); phospholipase C, gamma 1 (formerly subtype 148) (PLCG1); phospholipid scramblase; phosphoribosyl pyrophosphate synthetase-associated protein 1 (PRPSAP1); phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylaminoimidazole synthetase (GART); phosphorylase kinase, alpha 2 (liver), glycogen storage disease IX (PHKA2); phosphorylase, glycogen; brain (PYGB); phosphorylase, glycogen; liver (Hers disease, glycogen storage disease type VI) (PYGL); phosphorylation regulatory protein HP-10; phosphatidylinositol transfer protein (PITPN); pigment epithelium-derived factor (PEDF); pim-1 oncogene (PIM1); pinin, desmosome associated protein (PNN); placenta (Diff33); placenta (Diff48); plasminogen activator, urokinase receptor (PLAUR); platelet factor 4 (PF4); platelet/endothelial cell adhesion molecule (CD31 antigen) (PECAM1); platelet-activating factor acetylhydrolase 2 (40kD) (PAFAH2); platelet-activating factor acetylhydrolase, isoform Ib, alpha subunit (45kD) (PAFAH1B1); platelet-activating factor receptor (PTAFR); pleckstrin (PLEK); pleckstrin homology, Sec7 and coiled/coil domains 1 (cytohesin 1) (PSCD1); pleckstrin homology, Sec7 and coiled/coil domains, binding protein (PSCDBP); pM5 protein; PMP69; poly(A) polymerase (PAP); poly(A)-binding protein-like 1 (PABPL1); poly(rC)-binding protein 1 (PCBP1); polyadenylate



binding protein; polycystic kidney disease 1 (autosomal dominant) (PKD1); polymerase (DNA directed), beta (POLB); polymerase (DNA directed), gamma (POLG); polymerase (RNA) II (DNA directed) polypeptide A (220kD) (POLR2A); polymyositis/scleroderma autoantigen 2 (100kD) (PMSCL2); polypyrimidine tract binding protein (heterogeneous nuclear ribonucleoprotein I) (PTB); positive regulator of programmed cell death ICH-1L (Ich-1); postmeiotic segregation increased 2-like 12 (PMS2L12); postmeiotic segregation increased 2-like 8 (PMS2L8); potassium inwardly-rectifying channel, subfamily J, member 15 (KCNJ15); potassium voltage-gated channel, KQT-like subfamily, member 1 (KCNQ1); POU domain, class 2, associating factor 1 (POU2AF1); POU domain, class 2, transcription factor 1 (POU2F1); PPAR binding protein (PPARBP); PPAR gamma2; pre-B-cell colony-enhancing factor (PBEF); prefoldin 1 (PFDN1); prefoldin 5 (PRFLD5); pregnancy-associated plasma protein A (PAPPA); pre-mRNA splicing factor SRp20, 5'UTR; preprotein translocase (TIM17); prion protein; prion protein (p27-30) (Creutzfeld-Jakob disease, Gerstmann-Strausler-Scheinker syndrome, fatal familial insomnia) (PRNP); procollagen-lysine, 2-oxoglutarate 5-dioxygenase (lysine hydroxylase, Ehlers-Danlos syndrome type VI) (PLOD); procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), alpha polypeptide 1 (P4HA1); procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), beta polypeptide (protein disulfide isomerase; thyroid hormone binding protein p55) (P4HB); profilin 1 (PFN1); progesterone receptor-associated p48 protein (P48); prohibitin (PHB); proliferating cell nuclear antigen (PCNA); proliferation-associated gene A (natural killer-enhancing factor A) (PAGA); proline-serine-threonine phosphatase interacting protein 1 (PSTPIP1); prolyl endopeptidase (PREP); prolylcarboxypeptidase (angiotensinase C) (PRCP); promyelocytic leukemia (PML); properdin P factor, complement (PFC); pro-platelet basic protein (includes platelet basic protein, beta-thromboglobulin, connective tissue-activating peptide III, neutrophil-activating peptide-2) (PPBP); proprotein convertase subtilisin/kexin type 7 (PCSK7); prosaposin (variant Gaucher disease and variant metachromatic leukodystrophy) (PSAP); prostaglandin-endoperoxide synthase 1 (prostaglandin G/H synthase and cyclooxygenase) (PTGS1); prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase) (PTGS2); prostate carcinoma tumor antigen (pcta-1); protease inhibitor 1 (anti-elastase), alpha-1-antitrypsin (PI); protease inhibitor 2 (anti-elastase), proteasome (prosome, macropain) 26S subunit, ATPase, 1 (PSMC1); proteasome (prosome, macropain) 26S subunit, ATPase, 3 (PSMC3); proteasome

(prosome, macropain) 26S subunit, ATPase, 4 (PSMC4); proteasome (prosome, macropain) 26S subunit, ATPase, 5 (PSMC5); proteasome (prosome, macropain) 26S subunit, ATPase, 6 (PSMC6); proteasome (prosome, macropain) 26S subunit, non-ATPase, 11 (PSMD11); proteasome (prosome, macropain) 26S subunit, non-ATPase, 2 (PSMD2); proteasome (prosome, macropain) 26S subunit, non-ATPase, 5 (PSMD5); proteasome (prosome, macropain) 26S subunit, non-ATPase, 7 (Mov34 homolog) (PSMD7); proteasome (prosome, macropain) 26S subunit, non-ATPase, 12 (PSMD12); proteasome (prosome, macropain) activator subunit 1 (PA28 alpha) (PSME1); proteasome (prosome, macropain) subunit, alpha type, 3 (PSMA3); proteasome (prosome, macropain) subunit, alpha type, 5 (PSMA5); proteasome (prosome, macropain) subunit, alpha type, 7 (PSMA7); proteasome (prosome, macropain) subunit, beta type, 1 (PSMB1); proteasome (prosome, macropain) subunit, beta type, 10 (PSMB10); proteasome (prosome, macropain) subunit, beta type, 6 (PSMB6); proteasome (prosome, macropain) subunit, beta type, 8 (large multifunctional protease 7) (PSMB8); proteasome (prosome, macropain) subunit, beta type, 9 (large multifunctional protease 2) (PSMB9); proteasome (prosome, macropain) subunit, beta type, 7 (PSMB7); protective protein for beta-galactosidase (galactosialidosis) (PPGB); protein A alternatively spliced form 2 (A-2); protein activator of the interferon-induced protein kinase (PACT); protein disulfide isomerase-related protein (P5); protein geranylgeranyltransferase type I, beta subunit (PGGT1B); protein homologous to chicken B complex protein, guanine nucleotide binding (H12.3); protein kinase A anchoring protein; protein kinase C substrate 80K-H (PRKCSH); protein kinase C, beta 1 (PRKCB1); protein kinase C, delta (PRKCD); protein kinase C, eta (PRKCH); Protein kinase C-like 1 (PRKCL1); protein kinase, AMP-activated, gamma 1 non-catalytic subunit (PRKAG1); protein kinase, cAMP-dependent, regulatory, type I, alpha (tissue specific extinguisher 1) (PRKAR1A); protein kinase, DNA-activated, catalytic polypeptide (PRKDC); protein kinase, mitogen-activated 1 (MAP kinase 1; p40, p41) (PRKM1); protein kinase, mitogen-activated 6 (extracellular signal-regulated kinase, p97) (PRKM6); protein kinase, mitogen-activated, kinase 3 (MAP kinase 3) (PRKMK3); protein phosphatase 1, catalytic subunit, alpha isoform (PPP1CA); protein phosphatase 1, regulatory subunit 10 (PPPR10); protein phosphatase 1, regulatory subunit 7 (PPP1R7); protein phosphatase 2 (formerly 2A), catalytic subunit, beta isoform (PPP2CB); protein phosphatase 2 (formerly 2A), regulatory subunit B" (PR 72), alpha isoform and (PR 130), beta isoform (PPP2R3); protein phosphatase 2, regulatory subunit B (B56), alpha isoform

(PPP2R5A); protein phosphatase 2, regulatory subunit B (B56), delta isoform (PPP2R5D); protein phosphatase 2, regulatory subunit B (B56), gamma isoform (PPP2R5C); protein phosphatase 2A regulatory subunit alpha-isotype (alpha-PR65); protein phosphatase 4 (formerly X), catalytic subunit (PPP4C); protein tyrosine kinase 2 beta (PTK2B); protein tyrosine phosphatase epsilon; protein tyrosine phosphatase type IVA, member 2 (PTP4A2); protein tyrosine phosphatase, non-receptor type 1 (PTPN1); protein tyrosine phosphatase, non-receptor type 12 (PTPN12); protein tyrosine phosphatase, non-receptor type 2 (PTPN2); protein tyrosine phosphatase, non-receptor type 4 (megakaryocyte) (PTPN4); protein tyrosine phosphatase, non-receptor type 6 (PTPN6); protein tyrosine phosphatase, non-receptor type 7 (PTPN7); protein tyrosine phosphatase, receptor type, alpha polypeptide (PTPRA); protein tyrosine phosphatase, receptor type, c polypeptide (PTPRC); protein tyrosine phosphatase, receptor type, M (PTPRM); protein tyrosine phosphatase, receptor type, N polypeptide 2 (PTPRN2); protein with polyglutamine repeat (ERPROT213-21); protein-kinase, interferon-inducible double stranded RNA dependent inhibitor (PRKRI); protein-L-isoaspartate (D-aspartate) O-methyltransferase (PCMT1); proteoglycan 1, secretory granule (PRG1); prothymosin, alpha (gene sequence 28) (PTMA); prp28, U5 snRNP 100 kd protein (U5-100K); PRP4/STK/WD splicing factor (HPRP4P); PTK7 protein tyrosine kinase 7 (PTK7); purinergic receptor P2X, ligand-gated ion channel, 4 (P2RX4); purinergic receptor P2X, ligand-gated ion channel, 7 (P2RX7); puromycin-sensitive aminopeptidase (PSA); putative ATP(GTP)-binding protein; putative brain nuclearly-targeted protein (KIAA0765); putative chemokine receptor; GTP-binding protein (HM74); putative dienoyl-CoA isomerase (ECH1); putative G-binding protein; Putative human HLA class II associated protein I (PHAP1); Putative L-type neutral amino acid transporter (KIAA0436); putative mitochondrial space protein 32.1; putative nucleic acid binding protein; putative outer mitochondrial membrane 34 kDa translocase Htom34; putative translation initiation factor (SUI1); putative tumor suppressor protein (123F2); pyrroline 5-carboxylate reductase; pyruvate dehydrogenase (lipoamide) alpha 1 (PDHA1); pyruvate dehydrogenase (lipoamide) beta (PDHB); Pyruvate dehydrogenase complex, lipoyl-containing component X; E3-binding protein (PDX1); pyruvate kinase, muscle (PKM2); RAB, member of RAS oncogene family-like (RABL); RAB1, member RAS oncogene family (RAB1); RAB11A, member RAS oncogene family (RAB11A); RAB11B, member RAS oncogene family (Rab11B); RAB27A, member RAS oncogene family (RAB27A); RAB5B, member RAS oncogene family (RAB5B); RAB6,

member RAS oncogene family (RAB6); RAB7, member RAS oncogene family (RAB7); RAB7, member RAS oncogene family-like 1 (RAB7L1); RAB9, member RAS oncogene family (RAB9); RAD50 (*S. cerevisiae*) homolog (RAD50); RAD51 (*S. cerevisiae*) homolog C (RAD51C); Radin blood group (RD); RAE1 (RNA export 1, *S.pombe*) homolog (RAE1); ralA-binding protein (RLIP76); RAN binding protein 2-like 1 (RANBP2L1); Ran GTPase activating protein 1 (RANGAP1); transforming growth factor, beta receptor II (70-80kD) (TGFB2); RAP1A, member of RAS oncogene family (RAP1A); RAR-related orphan receptor C (RORC); RAS guanyl releasing protein 2 (calcium and DAG-regulated); ras homolog gene family, member A (ARHA); ras homolog gene family, member G (rho G) (ARHG); ras homolog gene family, member H (ARHH); ras inhibitor (RIN1); Ras-GTPase activating protein SH3 domain-binding protein 2 (KIAA0660); Ras-GTPase-activating protein SH3-domain-binding protein (G3BP); ras-related C3 botulinum toxin substrate 2 (rho family, small GTP binding protein Rac2) (RAC2); RBQ-1; regulator of Fas-induced apoptosis (TOSO); regulator of G protein signalling 6 (RGS6); regulator of G-protein signalling 14 (RGS14); regulator of G-protein signalling 2, 24kD (RGS2); regulatory factor X, 4 (influences HLA class II expression) (RFX4); regulatory factor X, 5 (influences HLA class II expression) (RFX5); replication protein A1 (RPA1); reproduction 8 (D8S2298E); requiem, apoptosis response zinc finger gene (REQ); restin (Reed-Steinberg cell-expressed intermediate filament-associated protein) (RSN); retinoblastoma 1 (including osteosarcoma) (RB1); retinoblastoma binding protein 2 homolog 1 (RBBP2H1); retinoblastoma-binding protein 1 (RBBP1); retinoblastoma-binding protein 2 (RBBP2); retinoblastoma-binding protein 4 (RBBP4); retinoblastoma-binding protein 7 (RBBP7); retinoblastoma-like 2 (p130) (RBL2); retinoic acid receptor responder (tazarotene induced) 3 (RARRES3); retinoic acid receptor, alpha (RARA); retinoic acid responsive (NN8-4AG); retinoid X receptor beta (RXR-beta); REV3 (yeast homolog)-like, catalytic subunit of DNA polymerase zeta (REV3L); Rho GDP dissociation inhibitor (GDI) beta (ARHGDIB); Rho GTPase activating protein 4 (ARHGAP4); Rho-associated, coiled-coil containing protein kinase 2 (ROCK2); ribonuclease 6 precursor (RNASE6PL); ribonuclease, RNase A family, 2 (liver, eosinophil-derived neurotoxin) (RNASE2); ribonuclease/angiogenin inhibitor (RNH); ribonucleoside diphosphate reductase M1 subunit; ribophorin I (RPN1); ribophorin II (RPN2); ribosomal 18S rRNA; ribosomal 28S RNA; ribosomal protein L10 (RPL10); ribosomal protein L11 (RPL11); ribosomal protein L12 (RPL19); ribosomal protein L14 (RPL14); ribosomal

protein L17 (RPL17); ribosomal protein L18 (RPL18); ribosomal protein L18a (RPL18A); ribosomal protein L18a homologue; ribosomal protein L19 (RPL19); ribosomal protein L21 (RPL21); ribosomal protein L22 (RPL22); ribosomal protein L23 (RPL23); ribosomal protein L23a (RPL23A); ribosomal protein L26 (RPL26); ribosomal protein L27 (RPL27); ribosomal protein L27a (RPL27A); ribosomal protein L28 (RPL28); ribosomal protein L29 (RPL29); ribosomal protein L3 (RPL3); ribosomal protein L3 homologue; ribosomal protein L30 (RPL30); ribosomal protein L31 (RPL31); ribosomal protein L32 (RPL32); ribosomal protein L33-like (RPL33L); ribosomal protein L34 (RPL34); ribosomal protein L37 (RPL37); ribosomal protein L37a; ribosomal protein L38 (RPL38); ribosomal protein L4 (RPL4); ribosomal protein L41 (RPL41); ribosomal protein L5 (RPL5); ribosomal protein L6 (RPL6); ribosomal protein L7 (RPL7); ribosomal protein L7a (RPL7A); ribosomal protein L8 (RPL8); ribosomal protein L9 (RPL9); ribosomal protein S10 (RPS10); ribosomal protein S11 (RPS11); ribosomal protein S12 (RPS12); ribosomal protein S13 (RPS13); ribosomal protein S14 (RPS14); ribosomal protein S15 (RPS15); ribosomal protein S16 (RPS16); ribosomal protein S17 (RPS17); ribosomal protein S18; ribosomal protein S19 (RPS19); ribosomal protein S2 (RPS2); ribosomal protein S20 (RPS20); ribosomal protein S21 (RPS21); ribosomal protein S23 (RPS23); ribosomal protein S24 (RPS24); ribosomal protein S25 (RPS25); ribosomal protein S26 (RPS26); ribosomal protein S27 ((metallopanstimulin 1) (RPS27); ribosomal protein S28 (RPS28); ribosomal protein S29 (RPS29); ribosomal protein S3 (RPS3); ribosomal protein S3A (RPS3A); ribosomal protein S4, X-linked (RPS4X); ribosomal protein S4, Y-linked (RPS4Y); ribosomal protein S5 (RPS5); ribosomal protein S6 (RPS6); ribosomal protein S6 kinase, 90kD, polypeptide 1 (RPS6KA1); ribosomal protein S6 kinase, 90kD, polypeptide 2 (RPS6KA2); ribosomal protein S7 (RPS7); ribosomal protein S8 (RPS8); ribosomal protein S9 (RPS9); ribosomal protein, large, P0 (RPLP0); ribosomal protein, large, P1 (RPLP1); ribosomal RNA 28S; ribosomal RNA, 16S; ring finger protein 3 (RNF3); ring finger protein 4 (RNF4); ring zinc-finger protein (ZNF127-Xp); RNA (guanine-7-) methyltransferase (RNMT); RNA binding motif protein 5 (RBM5); RNA binding motif, single stranded interacting protein 2 (RBMS2); RNA helicase (putative), (Myc-regulated DEAD box protein) (MRD8); RNA helicase-related protein; RNA pol II largest subunit; RNA polymerase I subunit (RPA40); RTVP-1 protein; S100 calcium-binding protein A10 (annexin II ligand, calpactin I, light polypeptide (p11)) (S100A10); S100 calcium-binding protein A11 (calgizzarin) (S100A11); S100 calcium-binding protein A4

(calcium protein, calvasculin, metastasin, murine placental homolog)(S100A4); S100 calcium-binding protein A8 (calgranulin A) (S100A8); S100 calcium-binding protein A9 (calgranulin B) (S100A9); S164 gene; S-adenosylmethionine decarboxylase 1 (AMD1); SB classII histocompatibility antigen alpha-chain; SC35-interacting protein 1 (SRRP129); scaffold attachment factor B (SAFB); scRNA molecule, transcribed from Alu repeat; SEC14 (S. cerevisiae)-like (SEC14L); SEC23-like protein B (SEC23B); SEC63 (SEC63); secreted protein, acidic, cysteine-rich (osteonectin) (SPARC); secretory carrier membrane protein 1 (SCAMP1); secretory carrier membrane protein 2 (SCAMP2); secretory carrier membrane protein 3 (SCAMP3); secretory granule proteoglycan core (clones lambda-PG[6,7,8]); selectin L (lymphocyte adhesion molecule 1) (SELL); selectin P ligand (SELPLG); sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4D (SEMA4D); Ser/Arg-related nuclear matrix protein (plenty of prolines 101-like) (SRM160); serine palmitoyltransferase subunit I (SPTI); serine palmitoyltransferase, subunit II (LCB2); serine protease; serine protease inhibitor, Kunitz type, 2 (SPINT2); serine/threonine kinase 10 (STK10); serine/threonine kinase 19 (STK19); serine/threonine kinase 4 (STK4); serine/threonine protein kinase KKIALRE (KKIALRE); serine/threonine protein-kinase (NIK); serologically defined colon cancer antigen 16 (NY-CO-16); serologically defined colon cancer antigen 33 (SDCCAG33); serum/glucocorticoid regulated kinase (SGK); SET domain, bifurcated 1 (SETDB1); SH2 domain protein 1A, Duncan's disease lymphoproliferative syndrome) (SH2D1A); SH3 binding protein (SAB); SH3 domain protein 1B (SH3D1B); SH3-binding domain glutamic acid-rich protein like (SH3BGRL); SH3-domain GRB2-like 1 (SH3GL1); SHC (Src homology 2 domain-containing) transforming protein 1 (SHC1); siah binding protein 1 (SiahBP1); Sialomucin CD164 (CD164); sialophorin (gpL115, leukosialin, CD43) (SNP); sialyltransferase (STHM); sialyltransferase 1 (beta-galactoside alpha-2,6-sialyltransferase) (SIAT1); sialyltransferase 4A (beta-galactosidase alpha-2,3-sialyltransferase) (SIAT4A); sialyltransferase 8 (alpha-2, 8-polysialyltransferase) D (SIAT8D); signal peptidase 25kDa subunit; signal recognition particle 14kD (homologous Alu RNA-binding protein) (SRP14); signal recognition particle 54kD (SRP54); signal recognition particle 9kD (SRP9); signal recognition particle receptor ('docking protein') SRPR; signal regulatory protein, beta, 1 (SIRP-BETA-1); signal sequence receptor, alpha (translocon-associated protein alpha) (SSR1); signal sequence receptor, beta (translocon-associated protein beta) (SSR2); signal transducer and

activator of transcription (STAT5A); signal transducer and activator of transcription 2, 113KD (STAT2); signal transducer and activator of transcription 3 (acute-phase response factor) (STAT3); signal transducer and activator of transcription 5A (STAT5A); signal transducing adaptor molecule (SH3 domain and ITAM motif) 1 (STAM); silencing mediator of retinoid and thyroid hormone action (SMRT); SIT protein; Sjogren syndrome antigen A1 (52kD, ribonucleoprotein autoantigen SS-A/Ro) (SSA1); SKAP55 homologue (SKAP-HOM); skb1 (*S. pombe*) homolog (SKB1); skeletal muscle abundant protein; SMA3 (SMA3); small acidic protein; small EDRK-rich factor 2 (SERF2); small inducible cytokine A5 (RANTES) (SCYA5); small inducible cytokine subfamily C, member 2 (SCYC2); small nuclear ribonucleoprotein polypeptide B" (SNRPB2); small nuclear ribonucleoprotein polypeptide N (SNRPN); small nuclear ribonucleoprotein polypeptides B and B1 (SNRPB); small nuclear RNA activating complex, polypeptide 5, 19kD (SNAPC5); smallest subunit of ubiquinol-cytochrome c reductase; SMC (mouse) homolog, X chromosome (SMCX); SMT3B protein (2); SNC19; SNC73 protein (SNC73); solute carrier family 1 (neutral amino acid transporter), member 5 (SLC1A5); Solute carrier family 11 (proton-coupled divalent metal ion transporters), member 1 (SLC11A1); solute carrier family 17 (sodium phosphate), member 3 (SLC17A3); solute carrier family 19 (folate transporter), member 1 (SLC19A1); solute carrier family 2 (facilitated glucose transporter), member 1 (SLC2A1); solute carrier family 23 (nucleobase transporters), member 2 (SLC23A2); solute carrier family 25 (mitochondrial carrier; oxoglutarate carrier), member 11 (SLC25A11); solute carrier family 31 (copper transporters), member 2 (SLC31A2); solute carrier family 4, anion exchanger, member 2 (erythrocyte membrane protein band 3-like 1) (SLC4A2); solute carrier family 4, sodium bicarbonate cotransporter, member 8 (SLC4A8); solute carrier family 7 (cationic amino acid transporter,  $\gamma^+$  system), member 5 (SLC7A5); solute carrier family 7 (cationic amino acid transporter,  $\gamma^+$  system), member 6 (SLC7A6); solute carrier family 9 (sodium/hydrogen exchanger), isoform 6 (SLC9A6); somatic cytochrome c (HCS); SON DNA binding protein (SON); son of sevenless (*Drosophila*) homolog 1 (SOS1); sorcin (SRI); sortilin 1 (SORT1); sortilin-related receptor, L(DLR class) A repeats-containing (SORL1); sorting nexin 1 (SNX1); sorting nexin 2 (SNX2); Sp3 transcription factor (SP3); special AT-rich sequence binding protein 1 (binds to nuclear matrix/scaffold-associating DNA's) (SATB1); speckle-type POZ protein (SPOP); spectrin SH3 domain binding protein 1 (SSH3BP1); Spectrin, alpha, non-erythrocytic 1 (alpha-fodrin) (SPTAN1); spermidine/spermine N1-acetyltransferase (SAT);

spermine synthase (SMS); SPF31 (SPF31); sphingomyelin phosphodiesterase 1, acid lysosomal (acid sphingomyelinase) (SMPD1); spinocerebellar ataxia 1 (olivopontocerebellar ataxia 1, autosomal dominant, ataxin 1) (SCA1); spinocerebellar ataxia 2 (olivopontocerebellar ataxia 2, autosomal dominant, ataxin 2) (SCA2); spinocerebellar ataxia 7 (olivopontocerebellar atrophy with retinal degeneration) (SCA7); spliceosome associated protein (SAP 145); splicing factor (CC1.3) (CC1.3); splicing factor SRp40-1 (SRp40); splicing factor, arginine/serine-rich 11 (SFRS11); splicing factor, arginine/serine-rich 7 (35kD) (SFRS7); Src-like-adaptor (SLA); stannin (SNN); STAT induced STAT inhibitor 3 (SSI-3); STE20-like kinase 3 (MST-3); step II splicing factor SLU7 (SLU7); steroid sulfatase; steroid sulfatase (microsomal), arylsulfatase C, isozyme S (STS); sterol carrier protein 2 (SCP2); sterol O-acyltransferase (acyl-Coenzyme A: cholesterol acyltransferase) 1 (SOAT1); stimulated trans-acting factor (50 kDa) (STAF50); Stromal antigen 2 (STAG2); stromal interaction molecule 1 (STIM1); structure specific recognition protein 1 (SSRP1); succinate dehydrogenase complex, subunit A, flavoprotein (Fp) (SDHA); succinate dehydrogenase complex, subunit B, iron sulfur (Ip) (SDHB); succinate dehydrogenase complex, subunit C, integral membrane protein, 15kD (SDHC); succinate dehydrogenase complex, subunit D, Integral membrane protein (SDHD); succinate-CoA ligase, GDP-forming, beta subunit (SUCLG2); succinyl CoA synthetase; sudD (suppressor of bimD6, *Aspergillus nidulans*) homolog (SUDD); sulfotransferase family 1A, phenol-preferring, member 1 (SULT1A1); superoxide dismutase 1, soluble (amyotrophic lateral sclerosis 1 (adult)) (SOD1); superoxide dismutase 2, mitochondrial (SOD2); supervillin (SVIL); suppression of tumorigenicity 5 (ST5); suppressor of K<sup>+</sup> transport defect 1 (SKD1); suppressor of Ty (*S.cerevisiae*) 3 homolog (SUPT3H); suppressor of Ty (*S.cerevisiae*) 4 homolog 1 (SUPT4H1); suppressor of Ty (*S.cerevisiae*) 5 homolog (SUPT5H); suppressor of Ty (*S.cerevisiae*) 6 homolog (SUPT6H); suppressor of variegation 3-9 (*Drosophila*) homolog 1 (SUV39H1); survival of motor neuron 1, telomeric (SMN1); SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 2 (SMARCA2); SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4 (SMARCA4); SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily c, member 2 (SMARCC2); SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily e, member 1 (SMARCE1); synaptobrevin-like 1 (SYBL1); synaptosomal-associated protein, 23kD (SNAP23); syndecan binding protein (syntenin) (SDCBP); synovial



sarcoma, translocated to X chromosome (SSXT); syntaxin 16; syntaxin 3A (STX3A); syntaxin 6 (STX6); SYNTAXIN BINDING PROTEIN 3 (UNC-18 HOMOLOG 3) (UNC-18C); syntaxin-16C; SYT interacting protein (SIP); T cell activation, increased late expression (TACTILE); T cell receptor V alpha gene segment V-alpha-7 (clone IGRa11); T cell receptor V alpha gene segment V-alpha-w27; T3 receptor-associating cofactor-1; tafazzin (cardiomyopathy, dilated 3A (X-linked); endocardial fibroelastosis 2; Barth syndrome) (TAZ); tankyrase, TRF1-interacting ankyrin-related ADP-ribose polymerase (TNKS); TAR DNA-binding protein-43; Tat interactive protein (60kD) (TIP60); TATA box binding protein (TBP)-associated factor, RNA polymerase II, F, 55kD (TAF2F); TATA box binding protein (TBP)-associated factor, RNA polymerase II, G, 32kD (TAF2G); TATA box binding protein (TBP)-associated factor, RNA polymerase II, I, 28kD (TAF2I); Tax1 (human T-cell leukemia virus type I) binding protein 1 (TAX1BP1); TBP-associated factor 172 (TAF-172); T-cell death-associated gene 8 (TDAG8); T-cell leukemia/lymphoma 1A (TCL1A); T-cell receptor (delta D2-J1-region) (clone K3B); T-cell receptor delta gene D2-J1-region, clone K3B; T-cell receptor germline beta chain gene V-region (V) V-beta-MT1-1; T-cell receptor germline beta-chain gene J2.1 exon; T-cell receptor germline delta-chain D-J region; T-cell receptor interacting molecule (TRIM) protein; T-cell receptor rearranged delta-chain, V-region (V-delta 3-J); T-cell receptor, alpha (V,D,J,C) (TCRA); T-cell receptor, beta cluster (TCRB); T-cell receptor, delta (V,D,J,C) (TCRD); T-cell, immune regulator 1 (TCIRG1); TCF-1 mRNA for T cell factor 1; TCR eta =T cell receptor(eta-exon); TCR V Beta 13.2; TERA; testis enhanced gene transcript (TEGT); tetracycline transporter-like protein (TETRAN); tetratricopeptide repeat domain 1 (TTC1); tetratricopeptide repeat domain 2 (TTC2); tetratricopeptide repeat domain 3 (TTC3); TGFB1-induced anti-apoptotic factor 1 (TIAF1); thioredoxin reductase 1 (TXNRD1); threonyl-tRNA synthetase (TARS); thrombin inhibitor; thrombospondin 1 (THBS1); thromboxane A synthase 1 (platelet, cytochrome P450, subfamily V) (TBXAZ1); thymidine kinase 2, mitochondrial (TK2); thymidylate kinase (CDC8); thymine-DNA glycosylase (TDG); Thymosin, beta 10 (TMSB10); thymosin, beta 4, X chromosome (TMSB4X); thyroid autoantigen 70kD (Ku antigen) (G22P1); thyroid hormone receptor coactivating protein (SMAP); thyroid hormone receptor interactor 7 (TRIP7); thyroid hormone receptor interactor 8r (TRIP8); thyroid hormone receptor-associated protein, 230 kDa subunit (TRAP230); thyroid receptor interacting protein 15 (TRIP15); TI-227H; TIA1 cytotoxic granule-associated RNA-binding protein (TIA1); tissue inhibitor of metalloproteinase 1

(erythroid potentiating activity, collagenase inhibitor) (TIMP1); tissue inhibitor of metalloproteinase 2 (TIMP2); tissue specific transplantation antigen P35B (TSTA3); titin (TTN); TNF receptor-associated factor 2 (TRAF2); TNF receptor-associated factor 3 (TRAF3); toll-like receptor 1 (TLR1); toll-like receptor 2 (TLR2); toll-like receptor 4 (TLR4); toll-like receptor 5 (TLR5); topoisomerase (DNA) I (TOP1); topoisomerase (DNA) II beta (180kD) (TOP2B); topoisomerase (DNA) III beta (TOP3B); TR3beta; TRAF family member-associated NF-kB activator (TANK); transaldolase 1 (TALDO1); transaldolase-related protein; transcobalamin II (TCII); transcription elongation factor B (SIII), polypeptide 1-like (TCEB1L); transcription elongation factor B (SIII), polypeptide 3 (110kD, elongin A) (TCEB3); transcription factor 12 (HTF4, helix-loop-helix transcription factors 4) (TCF12); transcription factor 17 (TCF17); transcription factor 4 (TCF4); transcription factor 6-like 1 (mitochondrial transcription factor 1-like) (TCF6L1); transcription factor 7-like 2 (T-cell specific, HMG-box) (TCF7L2); transcription factor binding to IGHM enhancer 3 (TFE3); transcription factor IL-4 Stat; transcription factor TFIID; transcriptional adaptor 2 (ADA2, yeast, homolog)-like (TADA2L); transducin (beta)-like 1 (TBL1); transducin-like enhancer of split 3, homolog of Drosophila E(sp1) (TLE3); Transformation/transcription domain-associated protein (TRRAP); transformation-sensitive, transforming growth factor beta-stimulated protein TSC-22 (TSC22); transforming growth factor, beta receptor III (betaglycan, 300kD) (TGFBR3); transforming growth factor, beta-induced, 68kD (TGFBI); transgelin 2 (TAGLN2); trans-Golgi network protein (46, 48, 51kD isoforms) (TGN51); transient receptor potential channel 1 (TRPC1); transketolase (Wernicke-Korsakoff syndrome) (TKT); translation factor suil homolog (GC20); translin (TSN); translin-associated factor X (TSNAX); transmembrane glycoprotein (A33); transmembrane protein (63kD), endoplasmic reticulum/Golgi intermediate compartment (P63); transmembrane protein 1 (TMEM2); transmembrane trafficking protein (TMP21); transporter 1, ABC (ATP binding cassette) (TAP1); Treacher Collins-Franceschetti syndrome 1 (TCOF1); triosephosphate isomerase 1 (TPI1); tropomyosin; tropomyosin 4 (TPM4); TRPM-2 protein; tryptophan rich basic protein (WRB); tryptophanyl-tRNA synthetase (WARS); Ts translation elongation factor, mitochondrial (TSFM); topoisomerase (DNA) II beta (180kD); Tu translation elongation factor, mitochondrial (TUFM); tuberous sclerosis 1 (TSC1); tuberous sclerosis 2 (TSC2); tubulin, alpha 1 (testis specific) (TUBA1); tubulin, alpha, ubiquitous (K-ALPHA-1); tubulin-specific chaperone c (TBCC); tumor necrosis factor (ligand) superfamily, member 10 (TNFSF10); tumor

necrosis factor (ligand) superfamily, member 13 (TNFSF13); tumor necrosis factor (ligand) superfamily, member 14 (TNFSF14); tumor necrosis factor (ligand) superfamily, member 6 (TNFSF6); tumor necrosis factor (ligand) superfamily, member 8 (TNFSF8); tumor necrosis factor alpha-inducible cellular protein containing leucine zipper domains (FIP2); Tumor necrosis factor receptor superfamily member 7 (TNFRSF7); tumor necrosis factor receptor superfamily, member 10b (TNFRSF10B); tumor necrosis factor receptor superfamily, member 10c, decoy without an intracellular domain (TNFRSF10C); tumor necrosis factor receptor superfamily, member 12 (translocating chain-association membrane protein) (TNFRSF12); tumor necrosis factor receptor superfamily, member 14 (herpesvirus entry mediator) (TNFRSF14); tumor necrosis factor receptor superfamily, member 1B (TNFRSF1B); tumor necrosis factor receptor superfamily, member 6 (TNFRSF6); tumor necrosis factor receptor superfamily, member 7 (TNFRSF7); tumor necrosis factor, alpha-induced protein 2 (TNFAIP2); tumor necrosis factor, alpha-induced protein 3 (TNFAIP3); tumor protein 53-binding protein, 1 (TP53BP1); tumor protein p53 (Li-Fraumeni syndrome) (TP53); Tumor protein p53-binding protein (TP53BPL); tumor protein, translationally-controlled 1 (TPT1); tumor rejection antigen (gp96) 1 (TRA1); tumorous imaginal discs (Drosophila) homolog (TID1); TXK tyrosine kinase (TXK); type II integral membrane protein (NKG2-E); TYRO protein tyrosine kinase binding protein (TYROBP); tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta polypeptide (YWHAB); tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide (YWHAZ); Tyrosine kinase 2 (TYK2); tyrosyl-tRNA synthetase (YARS); U1 small nuclear RNA; U2(RNU2) small nuclear RNA auxillary factor 1 (non-standard symbol) (U2AF1); U22 snoRNA host gene (UHG); U4/U6-associated RNA splicing factor (HPRP3P); U49 small nuclear RNA; U5 snRNP-specific protein (220 kD), ortholog of *S. cerevisiae* Prp8p (PRP8); U5 snRNP-specific protein, 116 kD (U5-116KD); U5 snRNP-specific protein, 200 kDa (DEXH RNA helicase family) (U5-200-KD); Uba80 mRNA for ubiquitin; ubiquinol-cytochrome c reductase (6.4kD) subunit (UQCR); ubiquitin A-52 residue ribosomal protein fusion product 1 (UBA52); ubiquitin activating enzyme E1-like protein (GSA7); ubiquitin C (UBC); ubiquitin carboxyl-terminal esterase L3 (ubiquitin thiolesterase) (UCHL3); ubiquitin fusion degradation 1-like (UFD1L); ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A); ubiquitin specific protease 10 (USP10); ubiquitin specific protease 11 (USP11); ubiquitin specific protease 15 (USP15);

ubiquitin specific protease 19 (USP19); ubiquitin specific protease 4 (proto-oncogene) (USP4); ubiquitin specific protease 7 (herpes virus-associated) (USP7); ubiquitin specific protease 8 (USP8); ubiquitin-activating enzyme E1 (A1S9T and BN75 temperature sensitivity complementing) (UBE1); ubiquitin-activating enzyme E1, like (UBE1L); UBIQUITIN-BINDING PROTEIN P62; phosphotyrosine independent ligand for the Lck SH2 domain p62 (P62); ubiquitin-conjugating enzyme E2 variant 1 (UBE2V1); ubiquitin-conjugating enzyme E2 variant 2 (UBE2V2); ubiquitin-conjugating enzyme E2B (RAD6 homolog) (UBE2B); ubiquitin-conjugating enzyme E2G 2 (homologous to yeast UBC7) (UBE2G2); ubiquitin-conjugating enzyme E2H (homologous to yeast UBC8) (UBE2H); ubiquitin-conjugating enzyme E2L 1 (UBE2L1); ubiquitin-conjugating enzyme E2L 3 (UBE2L3); ubiquitin-conjugating enzyme E2L 6 (UBE2L6); ubiquitin-like 1 (sentrin) (UBL1); UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 2 (GalNAc-T2) (GALNT2); unactive progesterone receptor, 23 Kd (P23); unconventional myosin-ID (MYO1F); uncoupling protein homolog (UCPH); uppressor of Ty (*S.cerevisiae*) 6 homolog; upregulated by 1,25-dihydroxyvitamin D-3 (VDUP1); upstream binding factor (hUBF); UV radiation resistance associated gene (UVRAG); vacuolar proton-ATPase, subunit D; V-ATPase, subunit D (ATP6DV); v-akt murine thymoma viral oncogene homolog 1 (AKT1); Vanin 2 (VNN2); vasodilator-stimulated phosphoprotein (VASP); vav 1 oncogene (VAV1); vav 2 oncogene (VAV2); v-crkl avian sarcoma virus CT10 oncogene homolog (CRK); v-erb-b2 avian erythroblastic leukemia viral oncogene homolog 3 (ERBB3); Vesicle-associated membrane protein 1 (synaptobrevin 1) (VAMP1); vesicle-associated membrane protein 3 (cellubrevin) (VAMP3); v-fos FBJ murine osteosarcoma viral oncogene homolog (FOS); villin 2 (ezrin) (VIL2); villin-like protein; vimentin (VIM); vinculin (VCL); vitamin A responsive; cytoskeleton related (JWA); v-jun avian sarcoma virus 17 oncogene homolog (JUN); v-myb avian myeloblastosis viral oncogene homolog (MYB); voltage-dependent anion channel 1 (VDAC1); voltage-dependent anion channel 3 (VDAC3); von Hippel-Lindau syndrome (VHL); v-raf murine sarcoma 3611 viral oncogene homolog 1 (ARAF1); v-raf-1 murine leukemia viral oncogene homolog 1 (RAF1); v-ralsimian leukemia viral oncogene homolog B (ras related; GTP binding protein) (RALB); V-rel avian reticuloendotheliosis viral oncogene homolog A (nuclear factor of kappa light polypeptide gene enhancer in B-cells 3 (p65)) (RELA); v-yes-1 Yamaguchi sarcoma viral related oncogene homolog (LYN); WD repeat domain 1 (WDR1);

WD-repeat protein (HAN11); Williams-Beuren syndrome chromosome region 1 (WBSCR1); Wiskott-Aldrich syndrome protein interacting protein (WASPIP); X (inactive)-specific transcript (XIST); xeroderma pigmentosum, complementation group C (XPC); XIAP associated factor-1; XIB; X-linked anhidrotic ectodermal dysplasia; X-ray repair complementing defective repair in Chinese hamster cells 5 (double-strand-break rejoining; Ku autoantigen, 80kD) (XRCC5); XRP2 protein; yeloid differentiation primary response gene (88) (MYD88); zeta-chain (TCR) associated protein kinase (70kD) (ZAP70); zinc finger transcriptional regulator (GOS24); zinc-finger helicase (hZFH); Zn-15 related zinc finger protein (rlf); ZNF80-linked ERV9 long terminal repeat; ZW10 (Drosophila) homolog, centromere/kinetochore protein (ZW10); and zyxin (ZYG);

thereby profiling gene expression in a human subject.

45. (New) The method of claim 44, wherein the subject has a disease.

46. (New) The method of claim 45, wherein the disease is a heart failure.

47. (New) The method of claim 45, wherein the disease is colorectal cancer.

48. (New) The method of claim 44, wherein the subject is healthy.

49. (New) The method of claim 44, wherein determining the level is performed using at least one oligonucleotide of predetermined sequence.

50. (New) The method of claim 49, wherein the at least one oligonucleotide is specific for RNA encoded only by the gene in blood of human subjects, and/or is specific for cDNA complementary to RNA encoded only by the gene in blood of human subjects.

51. (New) The method of claim 50, wherein determining the level is performed by amplifying of RNA encoded by the gene to form amplified product, using at least one primer, and quantifying the amplified product, wherein the at least one oligonucleotide comprises the at least one primer.

52. (New) The method of claim 50, wherein determining the level is performed by hybridizing cDNA complementary to RNA encoded by the gene with at least one immobilized probe to form hybridization product, and quantifying the hybridization product, wherein the at least one oligonucleotide comprises the at least one probe.

53. (New) The method of claim 44, wherein determining the level is performed by amplifying RNA encoded by the gene.

54. (New) The method of claim 44, wherein determining the level is performed using an immobilized probe.

55. (New) The method of claim 44, wherein determining the level is performed by quantifying cDNA generated from RNA encoded by said gene.

56. (New) The method of claim 44, wherein determining the level is performed by quantifying EST generated from RNA encoded by the gene.

57. (New) The method of claim 44, wherein the level of RNA encoded by the gene is determined relative to a level of RNA encoded by an internal control gene in the blood sample.

58. (New) A method of characterizing a body state in a human subject, the method comprising:

determining, for each gene of a set of genes, a level of RNA encoded by the gene in a blood sample of the subject, wherein the set comprises the genes identified as:

zinc finger protein (Hs.47371); zinc finger protein (Hs.78765); zinc finger protein 10 (KOX 1) (ZNF10); zinc finger protein 136 (clone pHZ-20) (ZNF136); zinc finger protein 140 (clone pHZ-39) (ZNF140); zinc finger protein 143 (clone pHZ-1) (ZNF143); zinc finger protein 148 (pHZ-52) (ZNF148); zinc finger protein 173 (ZNF173); zinc finger protein 198 (ZNF198); zinc finger protein 200 (ZNF200); zinc finger protein 207 (ZNF207); zinc finger protein 216 (ZNF216); zinc finger protein 217 (ZNF217); zinc finger protein 230 (ZNF230); Zinc finger protein 239 (ANF239); zinc finger protein 261 (ZNF261); zinc finger protein 262 (ANF262); zinc finger protein 263 (ZNF263); zinc finger protein 264 (ZNF264); zinc finger protein 42

(myeloid-specific retinoic acid-responsive) (ZNF42); zinc finger protein 45 (a Kruppel-associated box (KRAB) domain polypeptide) (ZNF45); zinc finger protein 76 (expressed in testis) (ZNF76); zinc finger protein 84 (HPF2) (ZNF84); zinc finger protein 85 (ZNF85); zinc finger protein 9 (ZNF9); zinc finger protein C2H2-25 (ZNF25); zinc finger protein clone L3-4; zinc finger protein homologous to Zfp-36 in mouse (ZFP36); zinc finger protein HZF4; zinc finger protein RIZ; zinc finger protein, subfamily 1A, 1 (Ikaros) (LYF1); 100 kDa coactivator; 10kD protein (BC10); 14-3-3 epsilon; 14-3-3 protein; 15 kDa selenoprotein (SEP15); 1-phosphatidylinositol-4-phosphate 5-kinase isoform C; 23 kD highly basic protein; 2-5A-dependent RNase; 2'-5'oligoadenylate synthetase 2 (OAS2); 26S proteasome subunit 11; 36 kDa phosphotyrosine protein; 3-phosphoglycerate dehydrogenase (PGAD); 3-prime-phosphoadenosine 5-prime-phosphosulfate synthase 1 (PAPSS1); 5-aminoimidazole-4-carboxamide ribonucleotide transformylase; 5'-nucleotidase; 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase 4 (PFKFB4); 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase (PF2K); 71 kd heat shock cognate protein hsc70; 76 kDa membrane protein (P76); 8-oxoguanine DNA glycosylase (OGG1); a disintegrin and metalloprotease domain 10 (ADAM10); a disintegrin and metalloprotease domain 8 (ADAM8); A kinase anchor protein 95 (AKAP95); A kinase anchor protein, 149kD (AKAP149); Absent in melanoma 1 (AIM1); accessory proteins BAP31/BAP29 (DXS1357E); acetyl-Coenzyme A acyltransferase (peroxisomal 3-oxoacyl-Coenzyme A thiolase) (ACAA); acetyl-Coenzyme A transporter (ACATN); acidic 82 kDa protein; acidic protein rich in leucines (SSP29); Aconitase 2, mitochondrial (ACO2); actin binding protein MAYVEN; actin, beta (ACTB); actin, gamma 1 (ACTG1); actin-binding LIM protein (ABLIM); Actinin, alpha 1 (ACTN1); actinin, alpha 4 (ACTN4); activated p21cdc42Hs kinase (ACK); activated RNA polymerase II transcription cofactor 4 (PC4); activating transcription factor 1 (ATF1); activating transcription factor 2 (ATF2); activating transcription factor 4 (tax-responsive enhancer element B67) (ATF4); active BCR-related gene (ABR); acyl-CoA oxidase (AOX); acyl-Coenzyme A dehydrogenase, C-4 to C-12 straight chain (ACADM); acyl-Coenzyme A dehydrogenase, very long chain (ACADVL); acyloxyacyl hydrolase (neutrophil) (AOAH); adaptin, delta (ADTD); adaptin, gamma (ADTG); adaptor complex sigma3B (AP3S3); adaptor protein p150; adducin 1 (alpha) (ADD1); adducin 1 (alpha) (add1); adducin 3 (gamma) (ADD3); adenine nucleotide translocator 2 (fibroblast) (ANT2); adenine nucleotide translocator 3 (liver) (ANT3); adenomatous polyposis-coli protein (APC); adenosine deaminase, RNA-specific

(ADAR); adenylate cyclase 3 (ADCY3); adenylate cyclase 7 (ADCY7); adenylate kinase 2 (AK2); adenylyl cyclase-associated protein (CAP); adipose differentiation-related protein; adipophilin (ADFP); ADP-ribosylation factor 1 (ARF1); ADP-ribosylation factor 3 (ARF3); ADP-ribosylation factor 4 (ARF4); ADP-ribosylation factor 5 (ARF5); ADP-ribosylation factor domain protein 1, 64kD (ARFD1); ADP-ribosyltransferase (NAD<sup>+</sup>; poly (ADP-ribose) polymerase) (ADPRT); adrenergic, beta, receptor kinase 1 (ADRBK1); adrenoleukodystrophy-like 1 (ALDL1); AF-17; A-gamma-globin; A-gamma-globin (chromosome 11 allele); agammaglobulinaemia tyrosine kinase (ATK); AHNAK nucleoprotein (desmoyokin) (AHNAK); alanyl (membrane) aminopeptidase (aminopeptidase N, aminopeptidase M, microsomal aminopeptidase, CD13, p150) (ANPEP); alcohol dehydrogenase 5 (class III), chi polypeptide (ADH5); aldehyde dehydrogenase 1, soluble (ALDH1); aldehyde dehydrogenase 10 (fatty aldehyde dehydrogenase) (ALDH10); aldehyde reductase 1 (low Km aldose reductase) (ALDR1); aldo-keto reductase family 1, member A1 (aldehyde reductase) (AKR1A1); aldo-keto reductase family 1, member C3 (3-alpha hydroxysteroid dehydrogenase, type II) (AKR1C3); aldo-keto reductase family 7, member A2 (aflatoxin aldehyde reductase) (AKR7A2); aldolase A, fructose-bisphosphate (ALDOA); aldolase C, fructose-bisphosphate (ALDOC); alkaline phosphatase, liver/bone/kidney (ALPL); alpha mannosidase II isozyme; alpha thalassemia/mental retardation syndrome X-linked (ATRX); alpha-2 macroglobulin; alpha-2-globin; alpha-2-macroglobulin receptor/lipoprotein receptor protein (A2MR/LRP); alpha-polypeptide of N-acetyl-alpha-glucosaminidase (HEXA); alpha-spectrin; alpha-subunit of Gi2 a (GTP-binding signal transduction protein); aminin receptor 1 (67kD); Ribosomal protein SA (LAMR1); aminolevulinate, delta-, dehydratase (ALAD); amino-terminal enhancer of split (AES); amino-terminal enhancer of split (AES); AMP deaminase isoform L (AMPD2); amphiphysin (Stiff-Mann syndrome with breast cancer 128kD autoantigen) (AMPH); amphiphysin II; amphiphysin-like (AMPHL); AMY-1; amyloid beta (A4) precursor protein-binding, family B, member 1 (Fe65) (APBB1); amyloid beta (A4) precursor-like protein 2 (APLP2); amyloid precursor protein (APP); annexin I (lipocortin I) (ANX1); annexin II; annexin II (lipocortin II; calpactin I, heavy polypeptide) (ANX2); annexin IV (placental anticoagulant protein II) (ANX4); annexin V (endonexin II) (ANX5); annexin V (endonexin II) (ANXV); annexin VI (p68) (ANX6); annexin VII (synexin) (ANX7); antigen identified by monoclonal antibodies 12E7, F21 and O13 (MIC2); antigen identified by monoclonal antibodies 4F2,



TRA1.10, TROP4, and T43 (MDU1); anti-oxidant protein 2 (non-selenium glutathione peroxidase, acidic calcium-independent phospholipase A2) (KIAA0106); APEX nuclease (multifunctional DNA repair enzyme) (APEX); apoptosis inhibitor 1 (API1); apoptosis inhibitor 4 (survivin) (API4); apoptosis inhibitor 5 (API5); apoptosis specific protein (ASP); apoptotic protease activating factor (APAF1); aquaporin 3 (AQP3); aquaporin 9 (AQP9); arachidonate 12-lipoxygenase (ALOX12); arachidonate 5-lipoxygenase-activating protein (ALOX5AP); ariadne homolog (ARI); ariadne-2 (*D. melanogaster*) homolog (all-trans retinoic acid inducible RING finger ) (ARI2); ARP1 (actin-related protein 1, yeast) homolog A (centractin alpha) (ACTR1A); ARP2 (actin-related protein 2, yeast) homolog (ACTR2); ARP2/3 protein complex subunit 34 (ARC34); Arp2/3 protein complex subunit p41 (ARC41); Arp2/3 protein complex subunit p16 (ARC16); Arp2/3 protein complex subunit p20 (ARC20); Arp2/3 protein complex subunit p21(ARC21); ARP3 (actin-related protein 3, yeast) homolog (ACTR3); arrestin, beta 2 (ARRB2); arsA (bacterial) arsenite transporter, ATP-binding, homolog 1 (ASNA1); aryl hydrocarbon receptor nuclear translocator-like (ARNTL); aryl hydrocarbon receptor-interacting protein (AIP); arylsulfatase A (ARSA); asialoglycoprotein receptor 2 (ASGR2); asparaginyl-tRNA synthetase (NARS); aspartyl-tRNA synthetase (DARS); ataxia telangiectasia mutated (includes complementation groups A, C and D) (ATM); ataxin-2-like protein A2LP (A2LG); ATF6; ATP synthase (F1-ATPase) alpha subunit, mitochondrial; ATP synthase beta subunit gene; ATP synthase, H<sup>+</sup> transporting, mitochondrial F0 complex, subunit b, isoform 1 (ATP5F1); ATP synthase, H<sup>+</sup> transporting, mitochondrial F0 complex, subunit c (subunit 9), isoform 1 (ATP5G1); ATP synthase, H<sup>+</sup> transporting, mitochondrial F1 complex, alpha subunit, isoform 1, cardiac muscle (ATP5A1); ATP synthase, H<sup>+</sup> transporting, mitochondrial F1 complex, beta polypeptide (ATP5B); ATP synthase, H<sup>+</sup> transporting, mitochondrial F1 complex, gamma polypeptide 1 (ATP5C1); ATP synthase, H<sup>+</sup> transporting, mitochondrial F1F0, subunit g (ATP5JG); ATP/GTP-binding protein (HEAB); ATPase, Ca<sup>++</sup> transporting, ubiquitous (ATP2A3); ATPase, H<sup>+</sup> transporting, lysosomal (vacuolar proton pump) 21kD (ATP6F); ATPase, H<sup>+</sup> transporting, lysosomal (vacuolar proton pump) 31kD (ATP6E); ATPase, H<sup>+</sup> transporting, lysosomal (vacuolar proton pump) 42kD; Vacuolar proton-ATPase, subunit C; V-ATPase, subunit C (ATP6D); ATPase, H<sup>+</sup> transporting, lysosomal (vacuolar proton pump), alpha polypeptide, 70kD, isoform 1 (ATP6A1); ATPase, H<sup>+</sup> transporting, lysosomal (vacuolar proton pump), beta polypeptide, 56/58kD, isoform 2 (ATP6B2); ATPase, H<sup>+</sup> transporting,

lysosomal (vacuolar proton pump), member J (ATP6J); ATPase, H<sup>+</sup> transporting, lysosomal (vacuolar proton pump), subunit 1 (ATP6S1); ATP-binding cassette 50 (TNF-alpha stimulated) (ABC50); ATP-binding cassette protein M-ABC1 (mitochondrial); ATP-dependent RNA helicase; atrial natriuretic factor (ANF); autoantigen (Hs.75528); autoantigen (Hs.75682); autoantigen La/SS-B; axin (AXIN1); axonemal dynein heavy chain (DNAH17); basement membrane-induced gene (ICB1); basic leucine zipper nuclear factor 1 (JEM-1) (BLZF1); basic transcription factor 3 (BTF3); basigin (BSG); BC-2; B-cell CLL/lymphoma 6 (zinc finger protein 51) (BCL6); B-cell translocation gene 1, anti-proliferative (BTG); BCL2/adenovirus E1B 19kD-interacting protein 2 (BNIP2); BCL2/adenovirus E1B 19kD-interacting protein 3-like (BNIP3L); beclin 1 (coiled-coil, myosin-like BCL2-interacting protein) (BECN1); beta-1,2-N-acetylglucosaminyltransferase II (MGAT2); beta-2-microglobulin (B2M); beta-hexosaminidase alpha chain (HEXA); beta-tubulin; BING4; biphenyl hydrolase-like (serine hydrolase) (BPHL); bone marrow stromal cell antigen 1 (BST1); box-dependent myc-interacting protein isoform BIN1-10 (BIN1); brain my047 protein; branched chain keto acid dehydrogenase E1, alpha polypeptide (maple syrup urine disease) (BCKDHA); BRCA1 associated protein-1 (ubiquitin carboxy-terminal hydrolase) (BAP1); breakpoint cluster region protein, uterine leiomyoma, 1; barrier to autointegration factor (BCRP1); breakpoint cluster region protein, uterine leiomyoma, 2 (BCRP2); bromodomain-containing protein, 140kD (peregrin) (BR140); Bruton's agammaglobulinemia tyrosine kinase (Btk); Bruton's tyrosine kinase (BTK); BS4; BTG2 (BTG2); BTK region clone ftp; BTK region clone ftp-3; BUB3 (budding uninhibited by benzimidazoles 3, yeast) homolog (BUB3); butyrate response factor 1 (EGF-response factor 1) (BRF1); butyrophilin (BTF1); butyrophilin like receptor; CAG repeat containing (CTG4A); CAGH32; calcium/calmodulin-dependent protein kinase (CaM kinase) II gamma (CAMK2G); calcium/calmodulin-dependent protein kinase kinase (KIAA0787); calmodulin 1 (phosphorylase kinase, delta) (CALM1); calnexin (CANX); calpain, large polypeptide L1 (CAPN1); calpain, large polypeptide L2 (CANP2); calpain, small polypeptide (CAPN4); calpastatin (CAST); Calponin 2; calponin 2 (CNN2); calumenin (CALU); cAMP response element-binding protein CRE-Bpa (H\_GS165L15.1); cAMP-dependent protein kinase type II (Ht31); canicular multispecific organic anion transporter (CMOAT2); capping protein (actin filament) muscle Z-line, alpha 1 (CAPZA1); capping protein (actin filament) muscle Z-line, alpha 2 (CAPZA2); capping protein (actin filament) muscle Z-line, beta (CAPZB); capping protein (actin filament),

gelsolin-like (CAPG); carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase (CAD); carbonic anhydrase V, mitochondrial (CA5); carboxypeptidase D (CPD); cardiac beta-myosin heavy chain; carnitine/acylcarnitine translocase (CACT); Cas-Br-M (murine) ecotropic retroviral transforming sequence (cbl); casein kinase 1, alpha 1 (CSNK1A1); casein kinase 2, alpha 1 polypeptide (CSNK2A1); casein kinase I gamma 3L (CSNK1G3L); CASP8 and FADD-like apoptosis regulator (CFLAR); caspase 1, apoptosis-related cysteine protease (interleukin 1, beta, convertase) (CASP1); caspase 10, apoptosis-related cysteine protease (CASP10); caspase 3, apoptosis-related cysteine protease (CASP3); caspase 4, apoptosis-related cysteine protease (CASP4); caspase 5, apoptosis-related cysteine protease (CASP5); caspase 8, apoptosis-related cysteine protease (CASP8); caspase 9, apoptosis-related cysteine protease (CASP9); catalase (CAT); catechol-O-methyltransferase (COMT); catenin (cadherin-associated protein), alpha 1 (102kD) (CTNNA1); cathelicidin antimicrobial peptide (CAMP); cathepsin B (CTSB); cathepsin C (CTSC); cathepsin D (lysosomal aspartyl protease) (CTSD); cathepsin E (CTSE); cathepsin G (CTSG); cathepsin S (CTSS); cathepsin W (lymphopain) (CTSW); CCAAT/enhancer binding protein (C/EBP), alpha (CEBPA); CCAAT/enhancer binding protein (C/EBP), delta (CEBPB); CCAAT-box-binding transcription factor (CBF2); CD14 antigen (CD14); CD1C antigen, c polypeptide (CD1C); CD2 antigen (cytoplasmic tail)-binding protein 2 (CD2BP2); CD2 antigen (p50), sheep red blood cell receptor (CD2); CD2 cytoplasmic tail-binding protein 1 (CD2BP1); CD20 antigen (CD20); CD20 receptor (S7); CD22 antigen (CD22); CD24 signal transducer; CD33 antigen (gp67) (CD33); CD33 antigen-like 2; CD36 antigen (collagen type I receptor, thrombospondin receptor) (CD36); CD37 antigen (CD37); CD38 alt; CD39 antigen (CD39); CD3D antigen, delta polypeptide (TiT3 complex) (CD3D); CD3E antigen, epsilon polypeptide (TiT3 complex) (CD3E); CD3G antigen, gamma polypeptide (TiT3 complex) (CD3G); CD3Z antigen, zeta polypeptide (TiT3 complex) (CD3Z); CD3-zeta (clone pBS NK1); CD4 antigen (p55) (CD4); CD44 antigen (homing function and Indian blood group system (CD44); CD48 antigen (B-cell membrane protein) (CD48); CD53 antigen (CD53); CD63 antigen (melanoma 1 antigen) (CD63); CD68 antigen (CD68); CD74 antigen (invariant polypeptide of major histocompatibility complex, class II antigen-associated) (CD74); CD79A antigen (immunoglobulin-associated alpha) (CD79A); CD79B antigen (immunoglobulin-associated beta) (CD79B); CD8 antigen, alpha polypeptide (p32) (CD8A); CD8 antigen, beta polypeptide 1 (p37) (CD8B1); CD81 antigen (target of antiproliferative

antibody 1 (CD81); CD84 antigen (leukocyte antigen) (CD84); CD86 antigen; CD9 antigen (p24) (CD9); CD97 antigen (CD97); CDC23 (cell division cycle 23, yeast, homolog) (CDC23); CDC37 homolog; Cdc42 effector protein 3 (CEP3); CDC-like kinase (CLK); CDC-like kinase 2 (CLK2); CDW52 antigen (CAMPATH-1 antigen) (CDW52); cell cycle progression restoration 8 protein(CPR8); cell division cycle 10 (homologous to CDC10 of *S. cerevisiae*) (CDC10); cell division cycle 20, *S.cerevisiae* homolog (CDC20); cell division cycle 25B (CDC25B); cell division cycle 42 (GTP-binding protein, 25kD) (CDC42); centromere protein B (80kD) (CENPB); cep250 centrosome associated protein; ceroid-lipofuscinosis, neuronal 2, late infantile (Jansky-Bielschowsky disease) (CLN2); CGI-19 protein; chaperonin containing TCP1, subunit 3 (gamma) (CCT3); chaperonin containing TCP1, subunit 4 (delta) (CCT4); chaperonin containing TCP1, subunit 6A (zeta 1) (CCT6A); chaperonin containing TCP1, subunit 7 (eta) (CCT7); Chediak-Higashi syndrome 1 (CHS1); chemokine (C-C motif) receptor 2 (CCR2); chemokine (C-C motif) receptor 7 (CCR7); chemokine (C-X3-C) receptor 1 (CX3CR1); chemokine (C-X-C motif), receptor 4 (fusin) (CXCR4); chitinase 3-like 1 (cartilage glycoprotein-39) (CHI3L1); chitinase 3-like 2 (CHI3L2); chloride channel 6 (CLCN6); Chloride intracellular channel 1 (CLIC1); chondroitin sulfate proteoglycan 2 (versican) (CSPG2); chondroitin sulfate proteoglycan core protein; chromodomain helicase DNA binding protein 1 (CHD1); chromodomain helicase DNA binding protein 1-like (CHD1L); chromodomain helicase DNA binding protein 2 (CHD2); chromodomain helicase DNA binding protein 3 (CHD3); chromodomain helicase DNA binding protein 4 (CHD4); chromosome 1 open reading frame 7 (C1ORF7); chromosome 1 specific transcript KIAA0493; chromosome 17 open reading frame 1B (C17ORF1B); chromosome 4 open reading frame 1 (C4ORF1); chromosome condensation 1-like (CHC1L); chromosome X open reading frame 5 (CXORF5); chromosome-associated polypeptide C(CAP-C); cig42; cig5; citrate synthase (CS); class I major histocompatibility antigen (HLA-Cw3); clathrin assembly protein lymphoid myeloid leukemia (CALM); clathrin heavy chain; clathrin, heavy polypeptide-like 2 (CLTCL2); clathrin-associated/assembly/adaptor protein, medium 1 (CLAPM1); cleavage stimulation factor, 3' pre-RNA, subunit 3, 77kD (CSTF3); clk3; clone 23815 (Hs.82845); clone 24592 mRNA sequence; Clq/MBL/SPA receptor ClqR(p) (); clusterin (complement lysis inhibitor, SP-40,40, sulfated glycoprotein 2, testosterone-repressed prostate message 2, apolipoprotein J) (CLU); CMP-sialic acid transporter (CMPST); CMRF35; c-myc oncogene containing coxIII; coagulation factor II (thrombin)

receptor (F2R); coagulation factor V (proaccelerin, labile factor) (F5); coagulation factor XIII a subunit; coagulation factor XIII, A1 polypeptide (F13A1); coated vesicle membrane protein (RNP24); coatomer protein complex, subunit alpha (COPA); Cofilin 1 (non-muscle) (CFL1); cold inducible RNA-binding protein (CIRBP); cold shock domain protein A (CSDA); collagen, type IX, alpha 2 (COL9A2); colony stimulating factor 1 receptor, formerly McDonough feline sarcoma viral (v-fms) oncogene homolog (CSF1R); colony stimulating factor 2 receptor, beta, low-affinity (granulocyte-macrophage) (CSF2RB); colony stimulating factor 3 receptor (granulocyte) (CSF3R); complement component 5 receptor 1 (C5a ligand) (C5R1); conserved gene amplified in osteosarcoma (OS4); COP9 (constitutive photomorphogenic, Arabidopsis, homolog) subunit 3 (COPS3); COP9 homolog (HCOP9); COPII protein, homolog of *S. cerevisiae* SEC23p (SEC23A); copine I (CPNE1); coproporphyrinogen oxidase (coproporphyrin, harderoporphyrin) (CPO); core-binding factor, beta subunit (CBFB); coronin; cot (cancer Osaka thyroid) oncogene (COT); cryptochrome 1 (photolyase-like) (CRY1); CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) phosphatase, subunit 1 (CTDP1); C-terminal binding protein 1 (CTBP1); C-terminal binding protein 2 (CTBP2); CUG triplet repeat, RNA-binding protein 1 (CUGBP1); cullin 1 (CUL1); cullin 3 (CUL3); cut (*Drosophila*)-like 1 (CCAAT displacement protein) (CUTL1); cyclin D2 (CCND2); cyclin D3 (CCND3); cyclin G1 (CNNG1); cyclin I; cyclin T2 (CNNT2); cyclin-dependent kinase 2 (CDK2); cyclin-dependent kinase inhibitor (p27Kip1); cyclin-dependent kinase inhibitor 1A (p21, Cip1) (CDKN1A); cystatin B (stefin B) (CSTB); cysteine and glycine-rich protein 3 (cardiac LIM protein) (CSR3P); cytidine deaminase (CDA); cytochrome b-(245) beta chain N-terminal region (X-linked granulomatous disease gene); cytochrome b-245, beta polypeptide (chronic granulomatous disease) (CYBB); cytochrome c oxidase subunit IV (COX4); cytochrome c oxidase subunit Vb (COX5B); cytochrome c oxidase subunit VII-related protein (COX7RP); cytokine suppressive anti-inflammatory drug binding protein 1 (p38 MAP kinase) (CSBP1); Cytoplasmic antiproteinase=38 kda intracellular serine proteinase inhibitor; cytotoxic granule-associated RNA-binding protein p40-TIA-1; D123 (D123); D2-2; D38; damage-specific DNA binding protein 1 (127kD) (DDB1); DEAD/H (Asp-Glu-Ala-Asp/His) box binding protein 1 (DDXBP1); DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide (72KD) (P72); DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 1 (DDX1); DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 15 (DDX15); DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 16 (DDX16);

DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 3 (DDX3); DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 5 (RNA helicase, 68kD) (DDX5); DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 6 (RNA helicase, 54kD) (DDX6); DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 8 (RNA helicase, 54kD) (DDX8); DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 9 (RNA helicase A, nuclear DNA helicase II; leukophysin) (DDX9); DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide, Y chromosome (DBY); Death associated protein 3 (DAP3); death effector domain-containing protein (DEDD); death-associated protein 6 (DAXX); dedicator of cyto-kinesis 2 (DOCK2); defender against cell death 1 (DAD1); Defensin, alpha 1, myeloid-related sequence (DEFA1); DEK gene (D6S231E); delta sleep inducing peptide, immunoreactor (DSIP); dendritic cell protein (GA17); deoxycytidine kinase (DCK); deoxyribonuclease II, lysosomal (DNASE2); DGS-I; diacylglycerol kinase; diacylglycerol kinase alpha (DAGK1) (clone 24); diaphanous (Drosophila, homolog) 1 (DIAPH1); diaphorase (NADH) (cytochrome b-5 reductase) (DIA1); differentiated Embryo Chondrocyte expressed gene 1 (DEC1); differentiation antigen CD20; DiGeorge syndrome critical region gene 2 (DGCR2); dihydrolipoamide dehydrogenase (E3 component of pyruvate dehydrogenase complex, 2-oxo-glutarate complex, branched chain keto acid dehydrogenase complex) (DLD); dihydrolipoamide S-acetyltransferase (E2 component of pyruvate dehydrogenase complex) (DLAT); dihydropyrimidinase-like 2 (DPYSL2); dinG gene; diphtheria toxin resistance protein required for diphthamide biosynthesis (Saccharomyces)-like 2 (DPH2L2); DJ-1 protein; Dmx-like 1 (DMXL1); DNA (cytosine-5-)-methyltransferase 1 (DNMT1); DNA fragmentation factor, 40 kD, beta subunit (DFFB); DNA fragmentation factor, 45 kD, alpha subunit (DFFA); DNA mismatch repair protein (hMLH1); DNA segment on chromosome X (unique) 648 expressed sequence; DNA segment, single copy probe LNS-CAI/LNS-CAII (deleted in polyposis) (D5S346); DnaJ protein; docking protein 2, 56kD (DOK2); dolichyl-diphosphooligosaccharide-protein glycosyltransferase (DDOST); dolichyl-phosphate mannosyltransferase polypeptide 1, catalytic subunit (DPM1); down-regulated by activation (immunoglobulin superfamily) (DORA); D-type cyclin-interacting protein 1 (DIP1); dual specificity phosphatase 1 (DUSP1); dual specificity phosphatase 11 (RNA/RNP complex 1-interacting) (dusp11); dual specificity phosphatase 3 (vaccinia virus phosphatase VH1-related) (DUSP3); dual specificity phosphatase 6 (DUSP6); dynactin 1 (p150, Glued (Drosophila) homolog) (DYTN1); dynamin 2 (DNM2); dynein, cytoplasmic, light intermediate polypeptide 2 (DNCL12); dyskeratosis congenita 1,

dyskerin (DKC1); dystonia 1, torsion (autosomal dominant) (DYT1); dystrobrevin, beta (DTNB); dystrophin myotonia-containing WD repeat motif (DMWD); dystrophin myotonia-protein kinase (DMPK); E1B-55kDa-associated protein; E2F transcription factor 3 (E2F3); E2F transcription factor 4, p107/p130-binding (E2F4); E2F transcription factor 5, p130-binding (E2F5); E74-like factor 1 (ets domain transcription factor) (ELF1); E74-like factor 4 (ets domain transcription factor) (ELF4); early development regulator 2 (homolog of polyhomeotic 2) (EDR2); EBV induced G-protein coupled receptor (EBI2); ecotropic viral integration site 2B (EVI2B); ectin, galactoside-binding, soluble, 1 (galectin 1) (LGALS1); EGF-like-domain, multiple 4 (EGFL4); eIF-2-associated p67 homolog; elav-type RNA-binding protein (ETR-3); electron-transfer-flavoprotein, alpha polypeptide (glutaric aciduria II) (ETFA); ELK3, ETS-domain protein (SRF accessory protein 2) (ELK3); elongation factor 1-beta; elongation factor Ts (mitochondrial protein); elongation factor Tu-nuclear encoded mitochondrial; eMDC II protein; ems1 sequence (mammary tumor and squamous cell carcinoma-associated (p80/85 src substrate) (EMS1); endogenous retroviral element HC2; endosulfine alpha (ENSA); endothelial differentiation, sphingolipid G-protein-coupled receptor, 1 (EDG1); endothelial monocyte-activating polypeptide (EMAPII); enolase 1, (alpha) (ENO1); enolase 2, (gamma, neuronal) (ENO2); enolase-alpha; enoyl Coenzyme A hydratase 1, peroxisomal (ECH1); enoyl Coenzyme A hydratase, short chain, 1, mitochondrial (ECHS1); epidermal growth factor receptor pathway substrate 15 (EPS15); epithelial membrane protein 3 (EM[3]); Epoxide hydrolase 1, microsomal (xenobiotic) (EPHX1); ERF-2; ERp28 protein; erythrocyte membrane protein; erythroleukemic cells K562; EST (Hs.189509); estrogen receptor-related protein (hERRa1); ET binding factor 1 (SBF1); ets domain protein ERF; eukaryotic translation elongation factor 1 alpha 1 (EEF1A1); eukaryotic translation elongation factor 1 beta 2 (EEF1B2); eukaryotic translation elongation factor 1 delta (guanine nucleotide exchange protein) (EEF1D); eukaryotic translation elongation factor 1 gamma (EEF1G); eukaryotic translation elongation factor 2 (EEF2); eukaryotic translation initiation factor 2, subunit 1 (alpha, 35kD ) (EIF2S1); eukaryotic translation initiation factor 2, subunit 2 (beta, 38kD ) (EIF2S2); eukaryotic translation initiation factor 2, subunit 3 (gamma, 52kD) (EIF2S3); eukaryotic translation initiation factor 3, subunit 10 (theta, 150/170kD) (EIF3S10); eukaryotic translation initiation factor 3, subunit 2 (beta, 36kD) (EIF3S2); eukaryotic translation initiation factor 3, subunit 3 (gamma, 40kD) (EIF3S3); eukaryotic translation initiation factor 3, subunit 4 (delta, 44kD) (EIF3S4); eukaryotic translation

initiation factor 3, subunit 6 (48kD) (EIF3S6); eukaryotic translation initiation factor 3, subunit 6 (EIF3S6); eukaryotic translation initiation factor 3, subunit 7 (zeta, 66/67kD) (EIF3S7); eukaryotic translation initiation factor 3, subunit 8, 110KD (EIF3S8); eukaryotic translation initiation factor 4 gamma, 1 (EIF4G); eukaryotic translation initiation factor 4 gamma, 1 (EIF4G1); eukaryotic translation initiation factor 4 gamma, 2 (EIF4G2); eukaryotic translation initiation factor 4 gamma, 2 (EIFG2); eukaryotic translation initiation factor 4A, isoform 1 (EIF4A1); eukaryotic translation initiation factor 4A, isoform 2 (EIF4A2); eukaryotic translation initiation factor 4B (EIF4B); Eukaryotic translation initiation factor 4E binding protein 2 (EIF4EBP2); eukaryotic translation initiation factor 5 (EIF5); eukaryotic translation termination factor 1 (ETF1); EV12 protein; Ewing sarcoma breakpoint region 1 (EWSR1); EWS/FLI1 activated transcript 2 homolog (EAT-2); EWS-E1A-F chimeric protein; excision repair cross-complementing rodent repair deficiency, complementation group 1 (includes overlapping antisense sequence) (ERCC1); excision repair cross-complementing rodent repair deficiency, complementation group 5 (xeroderma pigmentosum, complementation group G (Cockayne syndrome)) (ERCC5); exostoses (multiple)-like 3 (EXTL3); F11; F1-ATPase beta subunit (F-1 beta); Fanconi anaemia group A; Fanconi anemia, complementation group A (FANCA); far upstream element (FUSE) binding protein 1 (FUBP1); farnesyl diphosphate synthase (farnesyl pyrophosphate synthetase, dimethylallyltranstransferase, geranyltranstransferase) (FDPS); farnesyl-diphosphate farnesyltransferase 1 (FDFT1); farnesyltransferase, CAAX box, beta (FNTB); Fas-ligand associated factor 1; fatty-acid-Coenzyme A ligase, long-chain 1 (FACL1); Fc fragment of IgA, receptor for (FCAR); Fc fragment of IgE, high affinity I, receptor for; gamma polypeptide (FCER1G); Fc fragment of IgE, low affinity II, receptor for (CD23A) (FCER2); Fc fragment of IgG, low affinity IIa, receptor for (CD32); Fc fragment of IgG, low affinity IIa, receptor for (CD32) (FCGR2A); Fc fragment of IgG, low affinity IIIa, receptor for (CD16) (FCGR3A); Fc fragment of IgG, receptor, transporter, alpha (FCGRT); fc-fgr; Fc-gamma-receptorIIIB (FCGR3B); feline sarcoma (Snyder-Theilen) viral (v-fes)/Fujinami avian sarcoma (PRCII) viral (v-fps) oncogene homolog(FES) c-fes/fps); female sterile homeotic-related gene 1 (mouse homolog) (FSRG1); ferritin L-chain; ferritin, heavy polypeptide 1 (FTH1); fetal Alzheimer antigen (FALZ); fetal Ig heavy chain variable region; fibrillarin (FBL); fibrinogen-like protein 2 (T49); ficolin (collagen/fibrinogen domain-containing) 1 (FCN1); filamin A, alpha (actin-binding protein-280) (FLNA); filamin B, beta (actin-binding protein-278)



(FLNB); Finkel-Biskis-Reilly murine sarcoma virus (FBR-MuSV) ubiquitously expressed (fox derived); ribosomal protein S30 (FAU); FK-506 binding protein; FK506-binding protein 1A (12kD) (FKBP1A); FK506-binding protein 1B (12.6 kD) (FKBP1B); FK506-binding protein 5 (FKBP5); Flightless I (Drosophila) homolog (FLII); FLN29 (FLN29); flotillin 2 (FLOT2); folate receptor 2 (fetal) (FOLR2); forkhead (Drosophila) homolog (rhabdomyosarcoma) like 1 (FKHRL1); Formyl peptide receptor 1 (FPR1); formyl peptide receptor-like 1 (FPRL1); fragile X mental retardation 1 (FMR1); fragile X mental retardation, autosomal homolog 1 (FXR1); Friend leukemia virus integration 1 (FLI1); fructose-bisphosphatase 1 (FBP1); FSHD-associated repeat DNA, proximal region; fucose-1-phosphate guanylyltransferase (FPGT); full length insert cDNA clone ZA78A09; full length insert cDNA YP07G10; fumarate hydratase (FH); FYN-binding protein (FYB-120/130) (FYB); G protein beta subunit-like protein 12.3; G protein-coupled receptor kinase 6 (GPRK6); G1 to S phase transition 1 (GSPT1); GA-binding protein transcription factor, beta subunit 2 (47kD) (GABPB2); galactose-1-phosphate uridylyltransferase (GALT); galactosidase, beta 1 (GLB1); galectin-9 isoform; gamma2-adaptin (G2AD); gamma-actin; gamma-aminobutyric acid (GABA) B receptor 1 (GABBR1); GATA-binding protein 2 (GATA2); GATA-binding protein 3 (GATA3); GCN5 (general control of amino-acid synthesis, yeast, homolog)-like 1 (GCN5L1); GDP dissociation inhibitor 1 (GDI1); GDP dissociation inhibitor 2 (GDI2); GDS-related protein (HKE1.5); gelsolin (amyloidosis, Finnish type) (GSN); general transcription factor II, I (GTF2I); general transcription factor II, i, pseudogene 1 (GTF2IP1); general transcription factor IIF, polypeptide 1 (74kD subunit) (GTF2F1); general transcription factor IIH, polypeptide 3 (34kD subunit) (GTF2H3); general transcription factor IIH, polypeptide 4 (52kD subunit) (GTF2H4); general transcription factor IIIA (GTF3A); general transcription factor IIIC, polypeptide 1 (alpha subunit, 220kD ) (GTF3C1); general transcription factor IIIC, polypeptide 2 (beta subunit, 110kD) (GTF3C2); germline immunoglobulin heavy chain (IGHV@); germline immunoglobulin heavy chain, variable region; germline immunoglobulin heavy chain, variable region, (21-2); GLE1 (yeast homolog)-like, RNA export mediator (GLE1L); glia maturation factor, beta (GMFB); glioma-associated oncogene homolog (zinc finger protein) (GLI); globin, alpha 2; glucocorticoid receptor (GRL); glucosyl phosphate isomerase (CONTAINS LARGE REPEAT); glucosamine (N-acetyl)-6-sulfatase (Sanfilippo disease IIID) (GNS); glucose transporter-like protein-III (GLUT3); glucosidase, alpha; acid (Pompe disease, glycogen storage disease type II) (GAA); glucosidase,

beta; acid (includes glucosylceramidase) (GBA); glutamate dehydrogenase 1 (GLUD1); glutamate-ammonia ligase (glutamine synthase) (GLUL); glutamate-cysteine ligase (gamma-glutamylcysteine synthetase), catalytic (72.8kD) (GLCLC); glutamine cyclotransferase; glutamine-fructose-6-phosphate transaminase 1 (GFPT1); glutamyl-tRNA synthetase; glutamyl-tRNA synthetase (QARS); glutamyl-prolyl-tRNA synthetase (EPRS); glutathione peroxidase 1 (GPX1); glutathione peroxidase 4 (phospholipid hydroperoxidase) (GPX4); glutathione S-transferase pi (GSTP1); glutathione S-transferase subunit 13 homolog; glyceraldehyde-3-phosphate dehydrogenase (GAPD); glycogenin (GYG); glycophorin C (Gerbich blood group) (GYPC); glycoprotein M6B (GPM6B); glycyl-tRNA synthetase (GARS); glyoxalase I (lactoyl glutathione lyase) (GLYI); golgi autoantigen, golgin subfamily a, 1 (GOLGA1); golgi autoantigen, golgin subfamily a, 4 (GOLGA4); golgi autoantigen, golgin subfamily b, macrogolgin (with transmembrane signal), 1 (GOLGB1); gp25L2 protein; grancalcin; granulin (GRN); Granulysin (NKG5); granzyme A (granzyme 1, cytotoxic T-lymphocyte-associated serine esterase 3) (GZMA); GRB2-related adaptor protein (GRAP); Grb2-related adaptor protein 2 (GRAP2); GRO1 oncogene (melanoma growth stimulating activity, alpha) (GRO1); growth arrest and DNA-damage-inducible gene (GADD153); growth arrest-specific 7 (GAS7); growth factor receptor-bound protein 2 (GRB2); GS1 (protein of unknown function); GS3955; GTP binding protein 1 (GTPBP1); GTPase activating protein-like (GAPL); Gu protein (GURDB); guanine nucleotide binding protein (G protein), alpha inhibiting activity polypeptide 2 (GNAI2); guanine nucleotide binding protein (G protein), alpha inhibiting activity polypeptide 3 (GNAI3); guanine nucleotide binding protein (G protein), alpha stimulating activity polypeptide 1 (GNAS1); guanine nucleotide binding protein (G protein), alpha transducing activity polypeptide 2 (GNAT2); guanine nucleotide binding protein (G protein), beta 5 (GNB5); guanine nucleotide binding protein (G protein), beta polypeptide 1 (GNB1); guanine nucleotide binding protein (G protein), q polypeptide (GNAQ); guanine nucleotide binding protein-like 1 (GNL1); guanine nucleotide exchange factor; guanine nucleotide regulatory factor (LFP40); GUANINE-MONOPHOSPHATE SYNTHETASE (GMPS); guanosine-diphosphatase like protein; guanylate binding protein 1, interferon-inducible, 67kD (GBP1); guanylate binding protein 2, interferon-inducible (GBP2); H2A histone family, member C (H2AFC); H2A histone family, member Y (H2AY); H2B histone family, member L (H2BFL); h2-calponin; H-2K binding factor-2; H3 histone family, member K

(H3FK); H3 histone, family 3A (H3F3A); H3 histone, family 3B (H3.3B) (H3F3B); hbc647; heat shock 27kD protein 1 (HSPB1); heat shock 40kD protein 1 (HSPF1); heat shock 60kD protein 1 (chaperonin) (HSPD1); heat shock 70kD protein 1 (HSPA1A); heat shock 70kD protein 5 (glucose-regulated protein, 78kD) (HSPA5); heat shock 70kD protein 6 (HSP70B') (HSPA6); heat shock 70kD protein 9B (mortalin-2) (HSPA9B); heat shock factor binding protein 1 (HSBP1); heat shock protein 90; heat shock protein, DNAJ-like 2 (HSJ2); Hect (homologous to the E6-AP (UBE3A) carboxyl terminus) domain and RCC1 (CHC1)-like domain (RLD) 1 (HERC1); hect domain and RLD 2 (HERC2); helicase-like protein (HLP); helix-loop-helix protein HE47 (E2A); hematopoietic cell-specific Lyn substrate 1 (HCLS1); heme oxygenase (decycling) 1 (HMOX1); hemoglobin beta (beta globin); hemoglobin, alpha 1 (HBA1); hemoglobin, beta (HBB); emokine (C-X-C motif), receptor 4 (fusin) (CXCR4); hemopoietic cell kinase (HCK); hepatitis C-associated microtubular aggregate protein p44; hepatoma-derived growth factor; Hermansky-Pudlak syndrome (HPS); heterogeneous nuclear ribonucleoprotein (C1/C2) (HNRPC); heterogeneous nuclear ribonucleoprotein A/B (HNRPAB); heterogeneous nuclear ribonucleoprotein A1 (HNRPA1); heterogeneous nuclear ribonucleoprotein A2/B1 (HNRPA2B1); heterogeneous nuclear ribonucleoprotein D (hnRNP D); heterogeneous nuclear ribonucleoprotein D-like (HNRPDL); heterogeneous nuclear ribonucleoprotein F (HNRPF); heterogeneous nuclear ribonucleoprotein G (HNRPG); heterogeneous nuclear ribonucleoprotein H1 (H) (HNRPH1); heterogeneous nuclear ribonucleoprotein K (HNRPK); heterogeneous nuclear ribonucleoprotein R (HNRPR); heterogeneous nuclear ribonucleoprotein U (scaffold attachment factor A) (HNRPU); hexokinase 1 (HK1); hexokinase 2 (HK2); hexokinase 3 (HK3); hexosaminidase A (alpha polypeptide) (HEXA; HGMP07I gene for olfactory receptor; High density lipoprotein binding protein (HDLBP); high-mobility group (nonhistone chromosomal) protein 1 (HMG1); High-mobility group (nonhistone chromosomal) protein 17 (HMG17); high-mobility group (nonhistone chromosomal) protein 2 (HMG2); high-mobility group (nonhistone chromosomal) protein isoforms I and Y; histidine ammonia-lyase (HAL); histidyl-tRNA synthetase (HARS); histocompatibility antigen (HLA-Cw3), class I; histone deacetylase 1 (HDAC); histone deacetylase 1 (HDAC1); histone deacetylase 5 (NY-CO-9); HK2 gene for hexokinase II; HL9 monocyte inhibitory receptor precursor; HLA class I heavy chain (HLA-Cw\*1701); HLA class I locus C heavy chain; HLA class II SB 4-beta chain; HLA class III region containing NOTCH4 gene; HLA-A; HLA-A\*7402; HLA-A11; HLA-B; HLA-B

associated transcript-1 (D6S81E); HLA-B associated transcript-2 (D6S51E); HLA-B\*1529; HLA-Bw72 antigen; HLA-C gene (HLA-Cw\*0701 allele); HLA-Cw\*0701; HLA-Cw\*0801; HLA-Cw\*1203; HLA-DR alpha-chain; HLA-F (leukocyte antigen F); HMG box containing protein 1; Hmob33; HMT1 (hnRNP methyltransferase, *S. cerevisiae*)-like 1 (HRMT1L1); homeodomain-interacting protein kinase 3 (HIPK3); homolog of *Drosophila* past (PAST); homolog of yeast (*S. cerevisiae*) ufd2 (UFD2); HPV16 E1 protein binding protein; HRIHFB2157; hsc70 gene for 71 kd heat shock cognate protein; HSPC012; HSPC021; HsPex13p; htra2-beta-2; HU-K4; hunc18b2; HUNKI; huntingtin-interacting protein HYPA/FBP11 (HYPA); hVps41p (HVPS41); hydroxyacyl-Coenzyme A dehydrogenase/3-ketoacyl-Coenzyme A thiolase/enoyl-Coenzyme A hydratase (trifunctional protein), alpha subunit (HADHA); hydroxyacyl-Coenzyme A dehydrogenase/3-ketoacyl-Coenzyme A thiolase/enoyl-Coenzyme A hydratase (trifunctional protein), beta subunit (HADHB); hydroxysteroid (17-beta) dehydrogenase 1 (HSD17B1); hypoxia-inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor) (HIF1A); Ia-associated invariant gamma-chain (clones lambda-y (1,2,3)); iduronate 2-sulfatase (Hunter syndrome) (IDS); Ig heavy chain variable region; Ig heavy chain variable region (VH4DJ) (clone T14.4); Ig heavy chain variable region (VH4DJ) (clone T22.18); Ig J chain; Ig kappa; IG kappa light chain variable region A20; Ig lambda light chain variable region (26-34ITIIF120); Ig mu-chain VDJ4-region; Ig rearranged anti-myelin kappa-chain (V-J4-region, hybridoma AE6-5); Ig rearranged H-chain mRNA V-region; IgG Fc binding protein (FC(GAMMA)BP); IgG heavy chain variable region (vH26); IgM heavy chain (C mu, membrane exons); Ikb kinase-beta (IKK-beta); IL-1 receptor type II; IL2-inducible T-cell kinase (ITK); immediate early protein (ETR101); immunoglobulin light chain (lambda); Immunoglobulin (CD79A) binding protein 1 (IGBP1); immunoglobulin G Fc receptor IIIB; immunoglobulin gamma 3 (Gm marker) (IGHG3); immunoglobulin heavy chain (VI-3B); immunoglobulin heavy chain J region; immunoglobulin heavy chain J region, B1 haplotype; immunoglobulin heavy chain variable region (IGH) (clone 21u-48); immunoglobulin heavy chain variable region (IGH) (clone 23u-1); immunoglobulin heavy chain variable region V3-43 (IGHV@); immunoglobulin heavy chain variable region V3-7 (IGHV@); immunoglobulin IgH heavy chain Fd fragment; immunoglobulin kappa light chain; immunoglobulin kappa light chain V-segment A27; immunoglobulin light chain; immunoglobulin light chain variable region (lambda IIIb subgroup) from IgM rheumatoid factor;

immunoglobulin M heavy chain V region=anti-lipid A antibody; immunoglobulin mu (IGHM); immunoglobulin mu binding protein 2 (IGHMBP2); immunoglobulin superfamily, member 2 (IGSF2); imogen 38 (IMOGEN38); IMP (inosine monophosphate) dehydrogenase 1 (IMPDH1); IMP (inosine monophosphate) dehydrogenase 2 (IMPDH2); inc finger protein 151 (pHZ-67) (ZNF151); inc finger protein, C2H2, rapidly turned over (ZNF20); inducible poly(A)-binding protein (IPABP); inducible protein (Hs.80313); inhibitor of DNA binding 2, dominant negative helix-loop-helix protein (ID2); inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase complex-associated protein (IKBKAP); inositol 1,3,4-trisphosphate 5/6-kinase; inositol 1,4,5 trisphosphate receptor type 1 (ITPR1); inositol 1,4,5-trisphosphate 3-kinase B (ITPKB); inositol monophosphatase; inositol polyphosphate-5-phosphatase, 145kD (INPP5D); Ins(1,3,4,5)P4-binding protein; insulin (INS); insulin-like growth factor 2 receptor (IGF2R); integral membrane protein 1 (ITM1); integral membrane protein 2C (ITM2C); integral membrane protein Tmp21-I (p23); integrin beta 4 binding protein (ITGB4BP); integrin, alpha 2b (platelet glycoprotein IIb of IIb/IIIa complex, antigen CD41B) (ITGA2B); integrin, alpha 5 (fibronectin receptor, alpha polypeptide) (ITGA5); integrin, alpha L (antigen CD11A (p180), lymphocyte function-associated antigen 1; alpha polypeptide) (ITGAL); integrin, alpha M (complement component receptor 3, alpha; also known as CD11b (p170), macrophage antigen alpha polypeptide) (ITGAM); integrin, alpha X (antigen CD11C (p150), alpha polypeptide) (ITGAX); integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2 MSK12) (ITGB1); integrin, beta 2 (antigen CD18 (p95), lymphocyte function-associated antigen 1; macrophage antigen 1 (mac-1) beta subunit) (ITGB2); integrin, beta 7 (ITGB7); Integrin-linked kinase (ILK); intercellular adhesion molecule 1 (CD54), human rhinovirus receptor (ICAM1); intercellular adhesion molecule 2 (ICAM2); intercellular adhesion molecule 3 (ICAM3); intercellular adhesion molecule 4, Landsteiner-Wiener blood group (ICAM4); Interferon consensus sequence binding protein 1 (ICSBP1); interferon regulatory factor 2 (IRF2); interferon regulatory factor1 (IRF1); interferon regulatory factor5 (IRF5); interferon, gamma-inducible protein 16 (IFI16); interferon, gamma-inducible protein 30 (IFI30); interferon-induced protein 17 (IFI17); interferon-induced protein 54 (IFI54); interferon-inducible (1-8D); interferon-inducible (1-8U); interferon-related developmental regulator 1 (IFRD1); interferon-stimulated transcription factor 3, gamma (48kD) (ISGF3G); interleukin 1 receptor, type II (IL1R2); Interleukin 10 receptor, beta (I.10RB); interleukin 12 receptor, beta 1 (IL12RB1); interleukin 13

receptor, alpha 1 (IL13RA1); interleukin 16 (lymphocyte chemoattractant factor) (IL16); interleukin 18 receptor 1 (IL18R1); interleukin 2 receptor, beta (IL2RB); interleukin 2 receptor, gamma (severe combined immunodeficiency) (IL2RG); interleukin 4 receptor (IL4R); interleukin 6 receptor (IL6R); interleukin 6 signal transducer (gp130, oncostatin M receptor) (IL6ST); interleukin 7 receptor (IL7R); interleukin 8 (IL8); interleukin 8 receptor alpha (IL8RA); interleukin 8 receptor, beta (IL8RB); interleukin enhancer binding factor 2, 45kD (ILF2); interleukin enhancer binding factor 3, 90kD (ILF3); interleukin-1 receptor-associated kinase 1 (IRAK1); interleukin-10 receptor, alpha (IL10RA); interleukin-11 receptor, alpha (IL11RA); intestinal carboxylesterase; IQ motif containing GTPase activating protein 1 (IQGAP1); IQ motif containing GTPase activating protein 2 (IQGAP2); isocitrate dehydrogenase 1 (NADP+), soluble (IDH1); isocitrate dehydrogenase 2 (NADP+), mitochondrial (IDH2); isocitrate dehydrogenase 3 (NAD+) alpha (IDH3A); isocitrate dehydrogenase 3 (NAD+) gamma (IDH3G); isolate TzCCR5-179 CCR5 receptor (CCR5); isopentenyl-diphosphate delta isomerase (IDI1); Janus kinase 1 (a protein tyrosine kinase) (JAK1); Janus kinase 2 (a protein tyrosine kinase) (JAK2); Jk-recombination signal binding protein (RBPJK); JM1 protein; jumonji (mouse) homolog (JMJ); jun D proto-oncogene (JUND); jun dimerization protein; junction plakoglobin (JUP); kangai 1 (suppression of tumorigenicity 6, prostate; CD82 antigen (R2 leukocyte antigen, antigen detected by monoclonal and antibody IA4)) (KAI1); karyopherin (importin) beta 1 (KPNB1); karyopherin (importin) beta 2 (KPNB2); karyopherin alpha 1 (importin alpha 5) (KPNA1); karyopherin alpha 2 (RAG cohort 1, importin alpha 1) (DPNA2); karyopherin alpha 3 (importin alpha 4) (KPNA3); karyopherin alpha 4 (KPNA4); Katanin (80 kDa) (KAT); KE03 protein; Keratin 8 (KRT8); ketohexokinase (fructokinase) (KHK); KIAA0002 (KIAA0002); KIAA0005 (KIAA0005); KIAA0010 (KIAA0010); KIAA0016 (KIAA0016); KIAA0017 (KIAA0017); KIAA0022 (KIAA0022); KIAA0023 (KIAA0023); KIAA0024 (KIAA0024); KIAA0025 (KIAA0025); KIAA0026 (KIAA0026); KIAA0027; KIAA0032 (KIAA0032); KIAA0040 (KIAA0040); KIAA0050 (KIAA0050); KIAA0053 (KIAA0053); KIAA0057 (KIAA0057); KIAA0058 (KIAA0058); KIAA0063 (KIAA0063); KIAA0064 (KIAA0064); KIAA0066; KIAA0068; KIAA0073; KIAA0081; KIAA0084; KIAA0085; KIAA0088; KIAA0090; KIAA0092 (KIAA0092); KIAA0094; KIAA0095 (KIAA0095); KIAA0096; KIAA0097 (KIAA0097); KIAA0099 (KIAA0099); KIAA0102 (KIAA0102); KIAA0105; KIAA0121 (KIAA0121); KIAA0123; KIAA0128; KIAA0129 (KIAA0129); KIAA0130 (KIAA0130); KIAA0136;

KIAA0137 (KIAA0137); KIAA0140 (KIAA0140); KIAA0141 (KIAA0141); KIAA0144 (KIAA0144); KIAA0146; KIAA0148 (KIAA0148); KIAA0154; KIAA0156; KIAA0160; KIAA0161 (KIAA0161); KIAA0164 (KIAA0164); KIAA0167 (KIAA0167); KIAA0168 (KIAA0168); KIAA0169; KIAA0171 (KIAA0171); KIAA0174 (KIAA0174); KIAA0179; KIAA0181; KIAA0183; KIAA0184; KIAA0193 (KIAA0193); KIAA0200 (KIAA0200); KIAA0210 (KIAA0210); KIAA0217; KIAA0219; KIAA0222 (KIAA0222); KIAA0223; KIAA0229; KIAA0232 (KIAA0232); KIAA0233 (KIAA0233); KIAA0235; KIAA0239; KIAA0240; KIAA0242; KIAA0248; KIAA0249 (KIAA0249); KIAA0253; KIAA0254 (KIAA0254); KIAA0255(KIAA0255); KIAA0262 (KIAA0262); KIAA0263 (KIAA0263); KIAA0264; KIAA0268; KIAA0275 (KIAA0275); KIAA0304 (KIAA0304); KIAA0308; KIAA0310 (KIAA0310); KIAA0315 (KIAA0315); KIAA0329 (KIAA0329); KIAA0330; KIAA0332; KIAA0333; KIAA0336 (KIAA0336); KIAA0342 (KIAA0342); KIAA0344 (KIAA0344); KIAA0354 (KIAA0354); KIAA0365 (KIAA0365); KIAA0370; KIAA0372 (KIAA0372); KIAA0373 (KIAA0373); KIAA0375 (KIAA0375); KIAA0377 (KIAA0377); KIAA0379; KIAA0380 (KIAA0380); KIAA0382 (KIAA0382); KIAA0383; KIAA0386 (KIAA0386); KIAA0392; KIAA0397 (KIAA0397); KIAA0403; KIAA0404; KIAA0409; KIAA0421; KIAA0428 (KIAA0428); KIAA0429 (KIAA0429); KIAA0430 (KIAA0430); KIAA0432 (KIAA0432); KIAA0435 (KIAA0435); KIAA0438 (KIAA0438); KIAA0447 (KIAA0447); KIAA0449; KIAA0456; KIAA0458 (KIAA0458); KIAA0462; KIAA0465; KIAA0476 (KIAA0476); KIAA0489; KIAA0494 (KIAA0494); KIAA0515; KIAA0521; KIAA0525; KIAA0530; KIAA0532; KIAA0537 (KIAA0537); KIAA0540; KIAA0543; KIAA0544; KIAA0549; KIAA0551; KIAA0554; KIAA0561; KIAA0562 (KIAA0562); KIAA0563 (KIAA0563); KIAA0569 (KIAA0569); KIAA0571 (KIAA0571); KIAA0573; KIAA0576; KIAA0580; KIAA0584; KIAA0592; KIAA0596; KIAA0598 (KIAA0598); KIAA0608; KIAA0614; KIAA0615 (KIAA0615); KIAA0621; KIAA0648; KIAA0652 (KIAA0652); KIAA0668; KIAA0669; KIAA0671 (KIAA0671); KIAA0675 (KIAA0675); KIAA0676; KIAA0677 (KIAA0677); KIAA0678; KIAA0679; KIAA0680 (KIAA0680); KIAA0692; KIAA0697; KIAA0699; KIAA0700; KIAA0737 (KIAA0737); KIAA0748 (KIAA0748); KIAA0763 (KIAA0763); KIAA0769 (KIAA0769); KIAA0782; KIAA0796; KIAA0798 (KIAA0798); KIAA0823; KIAA0854; KIAA0856; KIAA0860; KIAA0862; KIAA0873; KIAA0892; KIAA0906; KIAA0991; killer cell lectin-like receptor subfamily B,

member 1 (KLRB1); killer cell lectin-like receptor subfamily C, member 4 (KLRC4); kinectin 1 (kinesin receptor) (KTN1); kinesin family member 5B (KIF5B); kinesin-like DNA binding protein; Kruppel related gene (clone pHKR1RS); Kruppel-like zinc finger protein Zf9; kruppel-type zinc finger protein, ZK1; L apoferritin; lactate dehydrogenase A (LDHA); lactate dehydrogenase B (LDHB); lactotransferrin (LTF); laminin receptor 1 (67kD); Ribosomal protein SA (LAMR1); laminin receptor homolog {3' region}; laminin, gamma 1 (formerly LAMB2) (LAMC1); latent transforming growth factor beta binding protein 1 (LTBP1); LDLC; lectin, galactoside-binding, soluble, 2 (galectin 2) (LGALS2); lectin, galactoside-binding, soluble, 3 binding protein (galectin 6 binding protein) (LGALS3BP); leucine rich repeat (in FLII) interacting protein 1 (LRRFIP1); leucocyte immunoglobulin-like receptor-5 (LIR-5); leucocyte immunoglobulin-like receptor-6a (LIR-6); leucocyte immunoglobulin-like receptor-7 (LIR-7); leukemia virus receptor 1 (GLVR1); leukocyte adhesion protein p150,95 alpha subunit; leukocyte antigen, HLA-A2; leukocyte immunoglobulin-like receptor (MIR-10); leukocyte tyrosine kinase (LTK); leukocyte-associated Ig-like receptor 1 (LIAR1); leukotriene A4 hydrolase (LTA4H); leupaxin (LDPL); ligase I, DNA, ATP-dependent (LIG1); LIM and SH3 protein 1 (LASP1); LIM domain kinase 2 (LIMK2); Line-1 repeat mRNA with 2 open reading frames; Line-1 repeat with 2 open reading frames; lipase A, lysosomal acid, cholesterol esterase (Wolman disease) (LIPA); lipase, hormone-sensitive (LIPE); LMP7; Lon protease-like protein (LONP); low density lipoprotein-related protein 1 (alpha-2-macroglobulin receptor) (LRP1); low density lipoprotein-related protein-associated protein 1 (alpha-2-macroglobulin receptor-associated protein 1) (LRPAP1); low-affinity Fc-gamma receptor IIA; LPS-induced TNF-alpha factor (PIG7); Lst-1; L-type amino acid transporter subunit LAT1; lung resistance-related protein (LRP); Lymphocyte antigen 75 (LY75); lymphocyte antigen 9 (LY9); lymphocyte antigen HLA-B\*4402 and HLA-B\*5101; lymphocyte cytosolic protein 1 (L-plastin) (LCP1); lymphocyte cytosolic protein 2 (SH2 domain-containing leukocyte protein of 76kD) (LCP2); lymphocyte glycoprotein T1/Leu-1; lymphocyte-specific protein 1 (LSP1); lymphocyte-specific protein tyrosine kinase (LCK); lymphoid phosphatase LyP1; lymphoid-restricted membrane protein (LRMP); lymphoid-specific SP100 homolog (LYSP100-A); lymphoma proprotein convertase (LPC); lysosomal-associated membrane protein 1 (LAMP1); Lysosomal-associated membrane protein 2 (LAMP2); lysozyme (renal amyloidosis) (LYZ); lysyl-tRNA synthetase (KARS); M phase phosphoprotein 10 (U3 small nucleolar ribonucleoprotein) (MPP-10); M1-type and M2-



type pyruvate kinase; m6A methyltransferase (MT-A70); mab-21 (*C. elegans*)-like 1 (MAB21L1); MacMarcks; macrophage-associated antigen (MM130); MADS box transcription enhancer factor 2, polypeptide A (myocyte enhancer factor 2A) (MEF2A); MADS box transcription enhancer factor 2, polypeptide C (myocyte enhancer factor 2C) (MEF2C); major histocompatibility complex class I beta chain (HLA-B); major histocompatibility complex, class I, A (HLA-A); major histocompatibility complex, class I, C (HAL-C); major histocompatibility complex, class I, E (HLA-E); major histocompatibility complex, class II, DM BETA (HLA-DMB); major histocompatibility complex, class II, DP beta 1 (HLA-DPB1); major histocompatibility complex, class II, DR beta 1 (HLA-DRB1); Major histocompatibility complex, class II, Y box-binding protein I; DNA-binding protein B (YB1); malate dehydrogenase 1, NAD (soluble) (mdh1); malate dehydrogenase 1, NAD (soluble) (MDH1); malonyl-CoA decarboxylase precursor; maltase-glucoamylase (mg); manic fringe (*Drosophila*) homolog (MFNG); mannose phosphate isomerase (MPI); mannose phosphate isomerase (mpi); mannose-6-phosphate receptor (cation dependent) (M6PR); mannose-P-dolichol utilization defect 1 (MPDU1); mannosidase, alpha B, lysosomal (MANB); mannosyl (alpha-1,3-)-glycoprotein beta-1,2-N-acetylglucosaminyltransferase (MGAT1); map 4q35 repeat region; MAP kinase-interacting serine/threonine kinase 1 (MKNK1); MAP/ERK kinase kinase 3 (MEKK3); MAP/ERK kinase kinase 5 (MEKK5); MAP/microtubule affinity-regulating kinase 3 (MARK3); Marenstrin protein; MASL1; MAX dimerization protein (MAD); MaxiK potassium channel beta subunit; MBP-2 for MHC binding protein 2; Meis (mouse) homolog 3 (MEIS3); melanoma-associated antigen p97 (melanotransferrin); membrane cofactor protein (CD46, trophoblast-lymphocyte cross-reactive antigen) (MCP); membrane component, chromosome 17, surface marker 2 (ovarian carcinoma antigen CA125) (M17S2); membrane metallo-endopeptidase (neutral endopeptidase, enkephalinase, CALLA, CD10) (MME); membrane protein, palmitoylated 1 (55kD) (MPP1); meningioma expressed antigen (MGEA); meningioma-expressed antigen 11 (MEA11); Menkes Disease (ATP7A) putative Cu<sup>++</sup>-transporting P-type ATPase; metallothionein 2A (MT2A); metaxin 1 (MTX1); methionine adenosyltransferase II, alpha (MAT2A); methylene tetrahydrofolate dehydrogenase (NAD<sup>+</sup> dependent), methenyltetrahydrofolate cyclohydrolase (MTHFD2); methylenetetrahydrofolate dehydrogenase (NADP<sup>+</sup> dependent), methenyltetrahydrofolate cyclohydrolase, formyltetrahydrofolate synthetase (MTHFD1); methyltransferase, putative; MHC class 1 region; MHC class I antigen

(HLA-A2); MHC class I antigen (HLA-A33); MHC class I antigen (HLA-C); MHC class I antigen B\*5801 (HLA-B); MHC class I antigen HLA-A (HLA-A); MHC class I antigen HLA-A (HLA-A-2402 allele); MHC class I antigen HLA-A11K; MHC class I antigen HLA-B (B\*48 allele); MHC class I antigen HLA-B (HLA-B\*1502 allele); MHC class I antigen HLA-B (HLA-B\*40MD); MHC class I antigen HLA-B (HLA-B\*4103 allele); MHC class I antigen HLA-B gene (HLA-B\*4402 variant allele); MHC class I antigen HLA-B GN00110-B\*3910; MHC class I antigen HLA-Cw\*04011; MHC class I antigen R69772 HLA-A (A\*0302); MHC class I antigen SHCHA (HLA-B\*4403 variant); MHC class I histocompatibility antigen (HLA-B) (clone C21/14); MHC class I HLA B71; MHC class I HLA-A (Aw33.1); MHC class I HLA-B; MHC class I HLA-B (HLA-B-08NR allele); MHC class I HLA-B\*3512; MHC class I HLA-B44.2 chain; MHC class I HLA-B51-cd3.3; MHC class I HLA-C allele; MHC class I HLA-Cw\*0803; MHC class I HLA-Cw6; MHC class I lymphocyte antigen A2 (A2.1) variant DK1; MHC class I mic-B antigen; MHC class I polypeptide-related sequence A (MICA); MHC class II DNA Sequence (clone A37G7-1C11); MHC class II DQ-alpha associated with DRw6, DQw1 protein; MHC class II DQ-beta associated with DR2, DQw1 protein; MHC class II HAL-DQ-LTR5 (DQ,w8) DNA fragment, long terminal repeat region; MHC class II HLA-DRB1; MHC class II HLA-DRw11-beta-I chain (DRw11.3); MHC class II lymphocyte antigen (DPw4-beta-1); MHC microsomal stress 70 protein ATPase core (stch); microtubule-associated protein 4 (MAP4); microtubule-associated protein 7 (MAP7); mineralocorticoid receptor (aldosterone receptor) (MLR); minichromosome maintenance deficient (*S. cerevisiae*) 3 (MCM31); minichromosome maintenance deficient (*S. cerevisiae*) 3-associated protein (MCM3AP); minichromosome maintenance deficient (*S. cerevisiae*) 5 (cell division cycle 46) (MCM5); mitochondrial 16S rRNA; mitochondrial ATP synthase (F1-ATPase) alpha subunit; mitochondrial ATP synthase c subunit (P1 form); mitochondrial cytochrome b small subunit of complex II; mitochondrial DNA loop attachment sequences (clone LAS34); mitochondrial DNA polymerase accessory subunit precursor (MtPolB) nuclear gene encoding mitochondrial protein;; mitochondrial DNA, complete genome; mitochondrial inner membrane preprotein translocase Tim17a; mitochondrial loop attachment sequence (clone LAS88); mitochondrial NADH dehydrogenase subunit 2 (ND2); mitochondrial translational initiation factor 2 (MTIF2); mitochondrion cytochrome b; mitogen inducible gene mig-2; mitogen-activated protein kinase-activated protein kinase 3 (MAPKAPK3); MLN51; moesin (MSN); monocytic leukaemia zinc

finger protein (MOZ); MOP1 (); motor protein (Hs.78504); mouse double minute 2, human homolog of; p53-binding protein (MDM2); M-phase phosphoprotein 6 (MPP-6); M-phase phosphoprotein, mpp11; MPS1; Mr 110,000 antigen; mu-adaptin-related protein-2; mu subunit of AP-4 (MU-ARP2); murine leukemia viral (bmi-1) oncogene homolog (BMI1); mutant (Daudi) beta2 - microglobulin; mutated in colorectal cancers (MCC); myeloid cell leukemia sequence 1 (BCL2-related) (MCL1); myeloid cell nuclear differentiation antigen (MNDA); myeloid differentiation primary response gene (88) (MYD88); myeloid leukemia factor 2 (MLF2); myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 7 (MLLT7); MYH9 (cellular myosin heavy chain); myomesin (M-protein) 2 (165kD) (MYOM2); myosin IE (MYO1E); myosin light chain kinase (MLCK); myosin phosphatase, target subunit 1 (MYPT1); myosin, heavy polypeptide 9, non-muscle (MYH9); myosin, light polypeptide, regulatory, non-sarcomeric (20kD) (MLCB); myosin-I beta; myristoylated alanine-rich protein kinase C substrate (MARCKS, 80K-L) (MACS); myxovirus (influenza) resistance 1, homolog of murine (interferon-inducible protein p78) (MX1); myxovirus (influenza) resistance 2, homolog of murine (MX2); N-acetylgalactosaminidase, alpha- (NAGA); N-acetylglucosamine receptor 1 (thyroid) (NAGR1); NACP/alpha-synuclein; N-acylaminoacyl-peptide hydrolase (APEH); N-acylsphingosine amidohydrolase (acid ceramidase) (ASAH); NAD<sup>+</sup>-specific isocitrate dehydrogenase beta subunit precursor (encoding mitochondrial protein); NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 5 (13kD, B13) (NDUFA5); NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 5 (16kD, SGD) (NDUFB5); NADH dehydrogenase (ubiquinone) Fe-S protein 2 (49kD) (NADH-coenzyme Q reductase) (NDUFS2); NADH dehydrogenase (ubiquinone) flavoprotein 2 (24kD) (NDUFV2); NADH:ubiquinone dehydrogenase 51 kDa subunit (NDUFV1); Nardilysin (N-arginine dibasic convertase) (NRD1); nascent-polypeptide-associated complex alpha polypeptide (NACA); natural killer cell group 7 sequence (NKG7); natural killer cell transcript 4 (NK4); natural killer-associated transcript 3 (NKAT3); natural killer-associated transcript 5 (NKAT5); natural killer-tumor recognition sequence (NKTR); N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 2 (NDST2); Ndr protein kinase; Nedd-4-like ubiquitin-protein ligase WWP1; nel (chicken)-like 2 (NELL2); N-ethylmaleimide-sensitive factor attachment protein, alpha (NAPA); N-ethylmaleimide-sensitive factor attachment protein, gamma (NAPG); neural precursor cell expressed, developmentally down-regulated 5 (NEDD5); neural precursor cell expressed,

developmentally down-regulated 8 (NEDD8); neuregulin 1 (NRG1); neuroblastoma RAS viral (v-ras) oncogene homolog (NRAS); Neurofibromin 2 (bilateral acoustic neuroma) (NF2); neuronal apoptosis inhibitory protein (NAIP); neuronal cell adhesion molecule (NRCAM); neuropathy target esterase (NTE); neurotrophic tyrosine kinase, receptor, type 1 (NTRK1); neutrophil cytosolic factor 4 (40kD); NG31; nibrin (NBS); NIK; Ninjurin 1; nerve injury-induced protein-1; Nmi; N-myristoyltransferase 1 (NMT1); No arches-like (zebrafish) zinc finger protein (NAR); non-histone chromosome protein 2 (*S. cerevisiae*)-like 1 (NHP2L1); non-muscle alpha-actinin; non-muscle myosin alkali light chain (Hs.77385); non-neuronal enolase (EC 4.2.1.11); non-receptor tyrosine phosphatase 1; normal keratinocyte subtraction library mRNA, clone H22a; notch group protein (N); novel protein; novel T-cell activation protein; N-sulfoglucosamine sulfohydrolase (sulfamidase) (SGSH); nsulin induced gene 1 (INSIG1); ntegrin, alpha 4 (antigen CD49D, alpha 4 subunit of VLA-4 receptor) (ITGA14); nterferon, gamma-inducible protein 16 (IFI16); nterleukin 1, beta (IL1RB); nuclear antigen H731-like protein; nuclear antigen Sp100 (SP100); nuclear autoantigenic sperm protein (histone-binding) (NASP); Nuclear domain 10 protein (NDP52); Nuclear factor (erythroid-derived 2)-like 2 (NFE2L2); Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1 (p105) (NFKB1); nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha (NFKBIA); nuclear factor related to kappa B binding protein (NFRKB); nuclear mitotic apparatus protein 1 (NUMA1); nuclear receptor coactivator 2 (GRIP1); nuclear receptor coactivator 3 (AIB3); nuclear receptor coactivator 4 (ELE1); nuclear receptor interacting protein 1 (NRIP1); nuclear respiratory factor 1 (NRF1); nuclear RNA helicase, DECD variant of DEAD box family (DDXL); nuclear transcription factor Y, alpha (NFYA); nuclear transcription factor, X-box binding 1 (NFX1); nuclear transport factor 2 (placental protein 15) (PP15); nucleobindin 1 (NUCB1); nucleolar phosphoprotein p130 (P130); nucleolar protein (KKE/D repeat) (NOP56); nucleolar protein (MSP58); nucleolar protein 1 (120kD) (NOL1); nucleolar protein p40; nucleolin (NCL); nucleophosmin (nucleolar phosphoprotein B23, numatrin) (NPM1); nucleophosmin-retinoic acid receptor alpha fusion protein NPM-RAR long form; nucleoporin 153kD (NUP153); nucleoporin 98kD (NUP98); nucleosome assembly protein; nucleosome assembly protein 1-like 1 (NAP1L1); nucleosome assembly protein 1-like 4 (NAP1L4); nucleosome assembly protein, 5'UTR; olfactory receptor (OR7-141); oligodendrocyte myelin glycoprotein (OMG); O-linked N-acetylglucosamine (GlcNAc) transferase (UDP-N-

acetylglucosamine:polypeptide-N-acetylglucosaminyl transferase) (OGT); ORF (Hs.77868); ORF1; MER37; origin recognition complex, subunit 2 (yeast homolog)-like (ORC2L); ornithine aminotransferase (gyrate atrophy) (OAT); ornithine decarboxylase (ODC); ornithine decarboxylase antizyme, ORF 1 and ORF 2; orphan receptor (Hs.100221); OS-9 precursor; ovel centrosomal protein RanBPM (RANBPM); over-expressed breast tumor protein; oviductal glycoprotein 1, 120kD (OVGP1); oxidase (cytochrome c) assembly 1-like (OXAIL); oxoglutarate dehydrogenase (lipoamide) (OGDH); oxysterol binding protein (OSBP); OZF; p21/Cdc42/Rac1-activated kinase 1 (yeast Ste20-related) (PAK1); p40; P47 LBC oncogene; p53-induced protein (PIG11); p62 nucleoporin; p63 mRNA for transmembrane protein; palmitoyl-protein thioesterase (ceroid-lipofuscinosis, neuronal 1, infantile; Haltia-Santavuori disease) (PPT); papillary renal cell carcinoma (translocation-associated) (PRCC); PAR protein; PAX3/forkhead transcription factor gene fusion; paxillin (PXN); PBK1 protein; PDZ domain protein (Drosophila inaD-like) (INALD); peptidase D (PEPD); peptidylprolyl isomerase A (cyclophilin A) (PPIA); peptidylprolyl isomerase D (cyclophilin D) (PPID); peptidylprolyl isomerase E (cyclophilin E) (PPIE); perforin 1 (preforming protein) (PRF1); peroxisomal acyl-CoA thioesterase (PTE1); Peroxisomal acyl-coenzyme A oxidase; peroxisomal farnesylated protein (PXF); phorbol-12-myristate-13-acetate-induced protein (PMAIP1); Phosphate carrier, mitochondrial (PHC); phosphate cytidyltransferase 1, choline, alpha isoform (PCYT1A); phosphatidylinositol 3-kinase delta catalytic subunit; phosphatidylinositol 4-kinase, catalytic, beta polypeptide (PIK4CB); phosphatidylinositol glycan, class H (PIGH); phosphatidylinositol transfer protein (PI-TPbeta); phosphatidylinositol transfer protein, membrane-associated (PITPNM); phosphatidylinositol-4-phosphate 5-kinase, type II, alpha (PIP5K2A); phosphatidylinositol-4-phosphate 5-kinase, type II, beta (PIP5K2B); phosphodiesterase 7A (PDE7A); phosphodiesterase IB (PDES1B); phosphoglucomutase 1 (PGM1); phosphogluconate dehydrogenase (PGD); phosphoglycerate kinase 1 (PGK1); phosphoglycerate mutase 1 (brain) (PGAM1); phosphoglycerate mutase 2 (muscle) (PGAM2); phosphoinositide-3-kinase, catalytic, alpha polypeptide (PIK3CA); phosphoinositide-3-kinase, catalytic, delta polypeptide (PIK3CD); phosphoinositide-3-kinase, catalytic, gamma polypeptide (PIK3CG); phospholipase C; phospholipase C, delta 1 (PLCD1); phospholipase C, gamma 1 (formerly subtype 148) (PLCG1); phospholipid scramblase; phosphoribosyl pyrophosphate synthetase-associated protein 1 (PRPSAP1); phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide

synthetase, phosphoribosylaminoimidazole synthetase (GART); phosphorylase kinase, alpha 2 (liver), glycogen storage disease IX (PHKA2); phosphorylase, glycogen; brain (PYGB); phosphorylase, glycogen; liver (Hers disease, glycogen storage disease type VI) (PYGL); phosphorylation regulatory protein HP-10; phosphatidylinositol transfer protein (PITPN); pigment epithelium-derived factor (PEDF); pim-1 oncogene (PIM1); pinin, desmosome associated protein (PNN); placenta (Diff33); placenta (Diff48); plasminogen activator, urokinase receptor (PLAUR); platelet factor 4 (PF4); platelet/endothelial cell adhesion molecule (CD31 antigen) (PECAM1); platelet-activating factor acetylhydrolase 2 (40kD) (PAFAH2); platelet-activating factor acetylhydrolase, isoform Ib, alpha subunit (45kD) (PAFAH1B1); platelet-activating factor receptor (PTAFR); pleckstrin (PLEK); pleckstrin homology, Sec7 and coiled/coil domains 1 (cytohesin 1) (PSCD1); pleckstrin homology, Sec7 and coiled/coil domains, binding protein (PSCDBP); pM5 protein; PMP69; poly(A) polymerase (PAP); poly(A)-binding protein-like 1 (PABPL1); poly(rC)-binding protein 1 (PCBP1); polyadenylate binding protein; polycystic kidney disease 1 (autosomal dominant) (PKD1); polymerase (DNA directed), beta (POLB); polymerase (DNA directed), gamma (POLG); polymerase (RNA) II (DNA directed) polypeptide A (220kD) (POLR2A); polymyositis/scleroderma autoantigen 2 (100kD) (PMSCL2); polypyrimidine tract binding protein (heterogeneous nuclear ribonucleoprotein I) (PTB); positive regulator of programmed cell death ICH-1L (Ich-1); postmeiotic segregation increased 2-like 12 (PMS2L12); postmeiotic segregation increased 2-like 8 (PMS2L8); potassium inwardly-rectifying channel, subfamily J, member 15 (KCNJ15); potassium voltage-gated channel, KQT-like subfamily, member 1 (KCNQ1); POU domain, class 2, associating factor 1 (POU2AF1); POU domain, class 2, transcription factor 1 (POU2F1); PPAR binding protein (PPARBP); PPAR gamma2; pre-B-cell colony-enhancing factor (PBEF); prefoldin 1 (PFDN1); prefoldin 5 (PRFLD5); pregnancy-associated plasma protein A (PAPPA); pre-mRNA splicing factor SRp20, 5'UTR; preprotein translocase (TIM17); prion protein; prion protein (p27-30) (Creutzfeld-Jakob disease, Gerstmann-Strausler-Scheinker syndrome, fatal familial insomnia) (PRNP); procollagen-lysine, 2-oxoglutarate 5-dioxygenase (lysine hydroxylase, Ehlers-Danlos syndrome type VI) (PLOD); procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), alpha polypeptide 1 (P4HA1); procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), beta polypeptide (protein disulfide isomerase; thyroid hormone binding protein p55) (P4HB); profilin 1 (PFN1); progesterone

receptor-associated p48 protein (P48); prohibitin (PHB); proliferating cell nuclear antigen (PCNA); proliferation-associated gene A (natural killer-enhancing factor A) (PAGA); proline-serine-threonine phosphatase interacting protein 1 (PSTPIP1); prolyl endopeptidase (PREP); prolylcarboxypeptidase (angiotensinase C) (PRCP); promyelocytic leukemia (PML); properdin P factor, complement (PFC); pro-platelet basic protein (includes platelet basic protein, beta-thromboglobulin, connective tissue-activating peptide III, neutrophil-activating peptide-2) (PPBP); proprotein convertase subtilisin/kexin type 7 (PCSK7); prosaposin (variant Gaucher disease and variant metachromatic leukodystrophy) (PSAP); prostaglandin-endoperoxide synthase 1 (prostaglandin G/H synthase and cyclooxygenase) (PTGS1); prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase) (PTGS2); prostate carcinoma tumor antigen (pcta-1); protease inhibitor 1 (anti-elastase), alpha-1-antitrypsin (PI); protease inhibitor 2 (anti-elastase), proteasome (prosome, macropain) 26S subunit, ATPase, 1 (PSMC1); proteasome (prosome, macropain) 26S subunit, ATPase, 3 (PSMC3); proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4); proteasome (prosome, macropain) 26S subunit, ATPase, 5 (PSMC5); proteasome (prosome, macropain) 26S subunit, ATPase, 6 (PSMC6); proteasome (prosome, macropain) 26S subunit, non-ATPase, 11 (PSMD11); proteasome (prosome, macropain) 26S subunit, non-ATPase, 2 (PSMD2); proteasome (prosome, macropain) 26S subunit, non-ATPase, 5 (PSMD5); proteasome (prosome, macropain) 26S subunit, non-ATPase, 7 (Mov34 homolog) (PMSD7); proteasome (prosome, macropain) 26S subunit, non-ATPase, 12 (PMSD12); proteasome (prosome, macropain) activator subunit 1 (PA28 alpha) (PSME1); proteasome (prosome, macropain) subunit, alpha type, 3 (PSMA3); proteasome (prosome, macropain) subunit, alpha type, 5 (PSMA5); proteasome (prosome, macropain) subunit, alpha type, 7 (PSMA7); proteasome (prosome, macropain) subunit, beta type, 1 (PSMB1); proteasome (prosome, macropain) subunit, beta type, 10 (PSMB10); proteasome (prosome, macropain) subunit, beta type, 6 (PSMB6); proteasome (prosome, macropain) subunit, beta type, 8 (large multifunctional protease 7) (PSMB8); proteasome (prosome, macropain) subunit, beta type, 9 (large multifunctional protease 2) (PSMB9); proteasome (prosome, macropain) subunit, beta type, 7 (PSMB7); protective protein for beta-galactosidase (galactosialidosis) (PPGB); protein A alternatively spliced form 2 (A-2); protein activator of the interferon-induced protein kinase (PACT); protein disulfide isomerase-related protein (P5); protein geranylgeranyltransferase type I, beta subunit (PGGT1B); protein homologous to chicken

B complex protein, guanine nucleotide binding (H12.3); protein kinase A anchoring protein; protein kinase C substrate 80K-H (PRKCSH); protein kinase C, beta 1 (PRKCB1); protein kinase C, delta (PRKCD); protein kinase C, eta (PRKCH); Protein kinase C-like 1 (PRKCL1); protein kinase, AMP-activated, gamma 1 non-catalytic subunit (PRKAG1); protein kinase, cAMP-dependent, regulatory, type I, alpha (tissue specific extinguisher 1) (PRKAR1A); protein kinase, DNA-activated, catalytic polypeptide (PRKDC); protein kinase, mitogen-activated 1 (MAP kinase 1; p40, p41) (PRKM1); protein kinase, mitogen-activated 6 (extracellular signal-regulated kinase, p97) (PRKM6); protein kinase, mitogen-activated, kinase 3 (MAP kinase kinase 3) (PRKMK3); protein phosphatase 1, catalytic subunit, alpha isoform (PPP1CA); protein phosphatase 1, regulatory subunit 10 (PPPR10); protein phosphatase 1, regulatory subunit 7 (PPP1R7); protein phosphatase 2 (formerly 2A), catalytic subunit, beta isoform (PPP2CB); protein phosphatase 2 (formerly 2A), regulatory subunit B" (PR 72), alpha isoform and (PR 130), beta isoform (PPP2R3); protein phosphatase 2, regulatory subunit B (B56), alpha isoform (PPP2R5A); protein phosphatase 2, regulatory subunit B (B56), delta isoform (PPP2R5D); protein phosphatase 2, regulatory subunit B (B56), gamma isoform (PPP2R5C); protein phosphatase 2A regulatory subunit alpha-isotype (alpha-PR65); protein phosphatase 4 (formerly X), catalytic subunit (PPP4C); protein tyrosine kinase 2 beta (PTK2B); protein tyrosine phosphatase epsilon; protein tyrosine phosphatase type IVA, member 2 (PTP4A2); protein tyrosine phosphatase, non-receptor type 1 (PTPN1); protein tyrosine phosphatase, non-receptor type 12 (PTPN12); protein tyrosine phosphatase, non-receptor type 2 (PTPN2); protein tyrosine phosphatase, non-receptor type 4 (megakaryocyte) (PTPN4); protein tyrosine phosphatase, non-receptor type 6 (PTPN6); protein tyrosine phosphatase, non-receptor type 7 (PTPN7); protein tyrosine phosphatase, receptor type, alpha polypeptide (PTPRA); protein tyrosine phosphatase, receptor type, c polypeptide (PTPRC); protein tyrosine phosphatase, receptor type, M (PTPRM); protein tyrosine phosphatase, receptor type, N polypeptide 2 (PTPRN2); protein with polyglutamine repeat (ERPROT213-21); protein-kinase, interferon-inducible double stranded RNA dependent inhibitor (PRKRI); protein-L-isoaspartate (D-aspartate) O-methyltransferase (PCMT1); proteoglycan 1, secretory granule (PRG1); prothymosin, alpha (gene sequence 28) (PTMA); prp28, U5 snRNP 100 kd protein (U5-100K); PRP4/STK/WD splicing factor (HPRP4P); PTK7 protein tyrosine kinase 7 (PTK7); purinergic receptor P2X, ligand-gated ion channel, 4 (P2RX4); purinergic receptor P2X, ligand-gated ion channel, 7 (P2RX7); puromycin-



sensitive aminopeptidase (PSA); putative ATP(GTP)-binding protein; putative brain nuclearly-targeted protein (KIAA0765); putative chemokine receptor; GTP-binding protein (HM74); putative dienoyl-CoA isomerase (ECH1); putative G-binding protein; Putative human HLA class II associated protein I (PHAP1); Putative L-type neutral amino acid transporter (KIAA0436); putative mitochondrial space protein 32.1; putative nucleic acid binding protein; putative outer mitochondrial membrane 34 kDa translocase Htom34; putative translation initiation factor (SUI1); putative tumor suppressor protein (123F2); pyrroline 5-carboxylate reductase; pyruvate dehydrogenase (lipoamide) alpha 1 (PDHA1); pyruvate dehydrogenase (lipoamide) beta (PDHB); Pyruvate dehydrogenase complex, lipoyl-containing component X; E3-binding protein (PDX1); pyruvate kinase, muscle (PKM2); RAB, member of RAS oncogene family-like (RABL); RAB1, member RAS oncogene family (RAB1); RAB11A, member RAS oncogene family (RAB11A); RAB11B, member RAS oncogene family (Rab11B); RAB27A, member RAS oncogene family (RAB27A); RAB5B, member RAS oncogene family (RAB5B); RAB6, member RAS oncogene family (RAB6); RAB7, member RAS oncogene family (RAB7); RAB7, member RAS oncogene family-like 1 (RAB7L1); RAB9, member RAS oncogene family (RAB9); RAD50 (*S. cerevisiae*) homolog (RAD50); RAD51 (*S. cerevisiae*) homolog C (RAD51C); Radin blood group (RD); RAE1 (RNA export 1, *S.pombe*) homolog (RAE1); ralA-binding protein (RLIP76); RAN binding protein 2-like 1 (RANBP2L1); Ran GTPase activating protein 1 (RANGAP1); transforming growth factor, beta receptor II (70-80kD) (TGFB2); RAP1A, member of RAS oncogene family (RAP1A); RAR-related orphan receptor C (RORC); RAS guanyl releasing protein 2 (calcium and DAG-regulated); ras homolog gene family, member A (ARHA); ras homolog gene family, member G (rho G) (ARHG); ras homolog gene family, member H (ARHH); ras inhibitor (RIN1); Ras-GTPase activating protein SH3 domain-binding protein 2 (KIAA0660); Ras-GTPase-activating protein SH3-domain-binding protein (G3BP); ras-related C3 botulinum toxin substrate 2 (rho family, small GTP binding protein Rac2) (RAC2); RBQ-1; regulator of Fas-induced apoptosis (TOSO); regulator of G protein signalling 6 (RGS6); regulator of G-protein signalling 14 (RGS14); regulator of G-protein signalling 2, 24kD (RGS2); regulatory factor X, 4 (influences HLA class II expression) (RFX4); regulatory factor X, 5 (influences HLA class II expression) (RFX5); replication protein A1 (RPA1); reproduction 8 (D8S2298E); requiem, apoptosis response zinc finger gene (REQ); restin (Reed-Steinberg cell-expressed intermediate filament-associated protein) (RSN); retinoblastoma

1 (including osteosarcoma) (RB1); retinoblastoma binding protein 2 homolog 1 (RBBP2H1); retinoblastoma-binding protein 1 (RBBP1); retinoblastoma-binding protein 2 (RBBP2); retinoblastoma-binding protein 4 (RBBP4); retinoblastoma-binding protein 7 (RBBP7); retinoblastoma-like 2 (p130) (RBL2); retinoic acid receptor responder (tazarotene induced) 3 (RARRES3); retinoic acid receptor, alpha (RARA); retinoic acid responsive (NN8-4AG); retinoid X receptor beta (RXR-beta); REV3 (yeast homolog)-like, catalytic subunit of DNA polymerase zeta (REV3L); Rho GDP dissociation inhibitor (GDI) beta (ARHGDIB); Rho GTPase activating protein 4 (ARHGAP4); Rho-associated, coiled-coil containing protein kinase 2 (ROCK2); ribonuclease 6 precursor (RNASE6PL); ribonuclease, RNase A family, 2 (liver, eosinophil-derived neurotoxin) (RNASE2); ribonuclease/angiogenin inhibitor (RNH); ribonucleoside diphosphate reductase M1 subunit; ribophorin I (RPN1); ribophorin II (RPN2); ribosomal 18S rRNA; ribosomal 28S RNA; ribosomal protein L10 (RPL10); ribosomal protein L11 (RPL11); ribosomal protein L12 (RPL19); ribosomal protein L14 (RPL14); ribosomal protein L17 (RPL17); ribosomal protein L18 (RPL18); ribosomal protein L18a (RPL18A); ribosomal protein L18a homologue; ribosomal protein L19 (RPL19); ribosomal protein L21 (RPL21); ribosomal protein L22 (RPL22); ribosomal protein L23 (RPL23); ribosomal protein L23a (RPL23A); ribosomal protein L26 (RPL26); ribosomal protein L27 (RPL27); ribosomal protein L27a (RPL27A); ribosomal protein L28 (RPL28); ribosomal protein L29 (RPL29); ribosomal protein L3 (RPL3); ribosomal protein L3 homologue; ribosomal protein L30 (RPL30); ribosomal protein L31 (RPL31); ribosomal protein L32 (RPL32); ribosomal protein L33-like (RPL33L); ribosomal protein L34 (RPL34); ribosomal protein L37 (RPL37); ribosomal protein L37a; ribosomal protein L38 (RPL38); ribosomal protein L4 (RPL4); ribosomal protein L41 (RPL41); ribosomal protein L5 (RPL5); ribosomal protein L6 (RPL6); ribosomal protein L7 (RPL7); ribosomal protein L7a (RPL7A); ribosomal protein L8 (RPL8); ribosomal protein L9 (RPL9); ribosomal protein S10 (RPS10); ribosomal protein S11 (RPS11); ribosomal protein S12 (RPS12); ribosomal protein S13 (RPS13); ribosomal protein S14 (RPS14); ribosomal protein S15 (RPS15); ribosomal protein S16 (RPS16); ribosomal protein S17 (RPS17); ribosomal protein S18; ribosomal protein S19 (RPS19); ribosomal protein S2 (RPS2); ribosomal protein S20 (RPS20); ribosomal protein S21 (RPS21); ribosomal protein S23 (RPS23); ribosomal protein S24 (RPS24); ribosomal protein S25 (RPS25); ribosomal protein S26 (RPS26); ribosomal protein S27 ((metalloproteinase 1) (RPS27); ribosomal protein S28 (RPS28);

ribosomal protein S29 (RPS29); ribosomal protein S3 (RPS3); ribosomal protein S3A (RPS3A); ribosomal protein S4, X-linked (RPS4X); ribosomal protein S4, Y-linked (RPS4Y); ribosomal protein S5 (RPS5); ribosomal protein S6 (RPS6); ribosomal protein S6 kinase, 90kD, polypeptide 1 (RPS6KA1); ribosomal protein S6 kinase, 90kD, polypeptide 2 (RPS6KA2); ribosomal protein S7 (RPS7); ribosomal protein S8 (RPS8); ribosomal protein S9 (RPS9); ribosomal protein, large, P0 (RPLP0); ribosomal protein, large, P1 (RPLP1); ribosomal RNA 28S; ribosomal RNA, 16S; ring finger protein 3 (RNF3); ring finger protein 4 (RNF4); ring zinc-finger protein (ZNF127-Xp); RNA (guanine-7-) methyltransferase (RNMT); RNA binding motif protein 5 (RBM5); RNA binding motif, single stranded interacting protein 2 (RBMS2); RNA helicase (putative), (Myc-regulated DEAD box protein) (MRD8); RNA helicase-related protein; RNA pol II largest subunit; RNA polymerase I subunit (RPA40); RTVP-1 protein; S100 calcium-binding protein A10 (annexin II ligand, calpactin I, light polypeptide (p11)) (S100A10); S100 calcium-binding protein A11 (calgizzarin) (S100A11); S100 calcium-binding protein A4 (calcium protein, calvasculin, metastasin, murine placental homolog)(S100A4); S100 calcium-binding protein A8 (calgranulin A) (S100A8); S100 calcium-binding protein A9 (calgranulin B) (S100A9); S164 gene; S-adenosylmethionine decarboxylase 1 (AMD1); SB classII histocompatibility antigen alpha-chain; SC35-interacting protein 1 (SRRP129); scaffold attachment factor B (SAFB); scRNA molecule, transcribed from Alu repeat; SEC14 (S. cerevisiae)-like (SEC14L); SEC23-like protein B (SEC23B); SEC63 (SEC63); secreted protein, acidic, cysteine-rich (osteonectin) (SPARC); secretory carrier membrane protein 1 (SCAMP1); secretory carrier membrane protein 2 (SCAMP2); secretory carrier membrane protein 3 (SCAMP3); secretory granule proteoglycan core (clones lambda-PG[6,7,8]); selectin L (lymphocyte adhesion molecule 1) (SELL); selectin P ligand (SELPLG); sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4D (SEMA4D); Ser/Arg-related nuclear matrix protein (plenty of prolines 101-like) (SRM160); serine palmitoyltransferase subunit I (SPTI); serine palmitoyltransferase, subunit II (LCB2); serine protease; serine protease inhibitor, Kunitz type, 2 (SPINT2); serine/threonine kinase 10 (STK10); serine/threonine kinase 19 (STK19); serine/threonine kinase 4 (STK4); serine/threonine protein kinase KKIALRE (KKIALRE); serine/threonine protein-kinase (NIK); serologically defined colon cancer antigen 16 (NY-CO-16); serologically defined colon cancer antigen 33 (SDCCAG33); serum/glucocorticoid regulated kinase (SGK); SET

domain, bifurcated 1 (SETDB1); SH2 domain protein 1A, Duncan's disease lymphoproliferative syndrome) (SH2D1A); SH3 binding protein (SAB); SH3 domain protein 1B (SH3D1B); SH3-binding domain glutamic acid-rich protein like (SH3BGRL); SH3-domain GRB2-like 1 (SH3GL1); SHC (Src homology 2 domain-containing) transforming protein 1 (SHC1); siah binding protein 1 (SiahBP1); Sialomucin CD164 (CD164); sialophorin (gpL115, leukosialin, CD43) (SNP); sialyltransferase (STHM); sialyltransferase 1 (beta-galactoside alpha-2,6-sialyltransferase) (SIAT1); sialyltransferase 4A (beta-galactosidase alpha-2,3-sialyltransferase) (SIAT4A); sialyltransferase 8 (alpha-2, 8-polysialyltransferase) D (SIAT8D); signal peptidase 25kDa subunit; signal recognition particle 14kD (homologous Alu RNA-binding protein) (SRP14); signal recognition particle 54kD (SRP54); signal recognition particle 9kD (SRP9); signal recognition particle receptor ('docking protein') SRPR; signal regulatory protein, beta, 1 (SIRP-BETA-1); signal sequence receptor, alpha (translocon-associated protein alpha) (SSR1); signal sequence receptor, beta (translocon-associated protein beta) (SSR2); signal transducer and activator of transcription (STAT5A); signal transducer and activator of transcription 2, 113KD (STAT2); signal transducer and activator of transcription 3 (acute-phase response factor) (STAT3); signal transducer and activator of transcription 5A (STAT5A); signal transducing adaptor molecule (SH3 domain and ITAM motif) 1 (STAM); silencing mediator of retinoid and thyroid hormone action (SMRT); SIT protein; Sjogren syndrome antigen A1 (52kD, ribonucleoprotein autoantigen SS-A/Ro) (SSA1); SKAP55 homologue (SKAP-HOM); skb1 (S. pombe) homolog (SKB1); skeletal muscle abundant protein; SMA3 (SMA3); small acidic protein; small EDRK-rich factor 2 (SERF2); small inducible cytokine A5 (RANTES) (SCYA5); small inducible cytokine subfamily C, member 2 (SCYC2); small nuclear ribonucleoprotein polypeptide B" (SNRPB2); small nuclear ribonucleoprotein polypeptide N (SNRPN); small nuclear ribonucleoprotein polypeptides B and B1 (SNRPB); small nuclear RNA activating complex, polypeptide 5, 19kD (SNAPC5); smallest subunit of ubiquinol-cytochrome c reductase; SMC (mouse) homolog, X chromosome (SMCX); SMT3B protein (2); SNC19; SNC73 protein (SNC73); solute carrier family 1 (neutral amino acid transporter), member 5 (SLC1A5); Solute carrier family 11 (proton-coupled divalent metal ion transporters), member 1 (SLC11A1); solute carrier family 17 (sodium phosphate), member 3 (SLC17A3); solute carrier family 19 (folate transporter), member 1 (SLC19A1); solute carrier family 2 (facilitated glucose transporter), member 1 (SLC2A1); solute carrier family 23 (nucleobase transporters), member 2 (SLC23A2);

solute carrier family 25 (mitochondrial carrier; oxoglutarate carrier), member 11 (SLC25A11); solute carrier family 31 (copper transporters), member 2 (SLC31A2); solute carrier family 4, anion exchanger, member 2 (erythrocyte membrane protein band 3-like 1) (SLC4A2); solute carrier family 4, sodium bicarbonate cotransporter, member 8 (SLC4A8); solute carrier family 7 (cationic amino acid transporter, y<sup>+</sup> system), member 5 (SLC7A5); solute carrier family 7 (cationic amino acid transporter, y<sup>+</sup> system), member 6 (SLC7A6); solute carrier family 9 (sodium/hydrogen exchanger), isoform 6 (SLC9A6); somatic cytochrome c (HCS); SON DNA binding protein (SON); son of sevenless (*Drosophila*) homolog 1 (SOS1); sorcin (SRI); sortilin 1 (SORT1); sortilin-related receptor, L(DLR class) A repeats-containing (SORL1); sorting nexin 1 (SNX1); sorting nexin 2 (SNX2); Sp3 transcription factor (SP3); special AT-rich sequence binding protein 1 (binds to nuclear matrix/scaffold-associating DNA's) (SATB1); speckle-type POZ protein (SPOP); spectrin SH3 domain binding protein 1 (SSH3BP1); Spectrin, alpha, non-erythrocytic 1 (alpha-fodrin) (SPTAN1); spermidine/spermine N1-acetyltransferase (SAT); spermine synthase (SMS); SPF31 (SPF31); sphingomyelin phosphodiesterase 1, acid lysosomal (acid sphingomyelinase) (SMPD1); spinocerebellar ataxia 1 (olivopontocerebellar ataxia 1, autosomal dominant, ataxin 1) (SCA1); spinocerebellar ataxia 2 (olivopontocerebellar ataxia 2, autosomal dominant, ataxin 2) (SCA2); spinocerebellar ataxia 7 (olivopontocerebellar atrophy with retinal degeneration) (SCA7); spliceosome associated protein (SAP 145); splicing factor (CC1.3) (CC1.3); splicing factor SRp40-1 (SRp40); splicing factor, arginine/serine-rich 11 (SFRS11); splicing factor, arginine/serine-rich 7 (35kD) (SFRS7); Src-like-adaptor (SLA); stannin (SNN); STAT induced STAT inhibitor 3 (SSI-3); STE20-like kinase 3 (MST-3); step II splicing factor SLU7 (SLU7); steroid sulfatase; steroid sulfatase (microsomal), arylsulfatase C, isozyme S (STS); sterol carrier protein 2 (SCP2); sterol O-acyltransferase (acyl-Coenzyme A: cholesterol acyltransferase) 1 (SOAT1); stimulated trans-acting factor (50 kDa) (STAF50); Stromal antigen 2 (STAG2); stromal interaction molecule 1 (STIM1); structure specific recognition protein 1 (SSRP1); succinate dehydrogenase complex, subunit A, flavoprotein (Fp) (SDHA); succinate dehydrogenase complex, subunit B, iron sulfur (Ip) (SDHB); succinate dehydrogenase complex, subunit C, integral membrane protein, 15kD (SDHC); succinate dehydrogenase complex, subunit D, Integral membrane protein (SDHD); succinate-CoA ligase, GDP-forming, beta subunit (SUCLG2); succinyl CoA synthetase; sudD (suppressor of bimD6, *Aspergillus nidulans*) homolog (SUDD); sulfotransferase family 1A, phenol-preferring, member

1 (SULT1A1); superoxide dismutase 1, soluble (amyotrophic lateral sclerosis 1 (adult)) (SOD1); superoxide dismutase 2, mitochondrial (SOD2); supervillin (SVIL); suppression of tumorigenicity 5 (ST5); suppressor of K<sup>+</sup> transport defect 1 (SKD1); suppressor of Ty (S.cerevisiae) 3 homolog (SUPT3H); suppressor of Ty (S.cerevisiae) 4 homolog 1 (SUPT4H1); suppressor of Ty (S.cerevisiae) 5 homolog (SUPT5H); suppressor of Ty (S.cerevisiae) 6 homolog (SUPT6H); suppressor of variegation 3-9 (Drosophila) homolog 1 (SUV39H1); survival of motor neuron 1, telomeric (SMN1); SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 2 (SMARCA2); SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4 (SMARCA4); SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily c, member 2 (SMARCC2); SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily e, member 1 (SMARCE1); synaptobrevin-like 1 (SYBL1); synaptosomal-associated protein, 23kD (SNAP23); syndecan binding protein (syntenin) (SDCBP); synovial sarcoma, translocated to X chromosome (SSXT); syntaxin 16; syntaxin 3A (STX3A); syntaxin 6 (STX6); SYNTAXIN BINDING PROTEIN 3 (UNC-18 HOMOLOG 3) (UNC-18C); syntaxin-16C; SYT interacting protein (SIP); T cell activation, increased late expression (TACTILE); T cell receptor V alpha gene segment V-alpha-7 (clone IGRa11); T cell receptor V alpha gene segment V-alpha-w27; T3 receptor-associating cofactor-1; tafazzin (cardiomyopathy, dilated 3A (X-linked); endocardial fibroelastosis 2; Barth syndrome) (TAZ); tankyrase, TRF1-interacting ankyrin-related ADP-ribose polymerase (TNKS); TAR DNA-binding protein-43; Tat interactive protein (60kD) (TIP60); TATA box binding protein (TBP)-associated factor, RNA polymerase II, F, 55kD (TAF2F); TATA box binding protein (TBP)-associated factor, RNA polymerase II, G, 32kD (TAF2G); TATA box binding protein (TBP)-associated factor, RNA polymerase II, I, 28kD (TAF2I); Tax1 (human T-cell leukemia virus type I) binding protein 1 (TAX1BP1); TBP-associated factor 172 (TAF-172); T-cell death-associated gene 8 (TDAG8); T-cell leukemia/lymphoma 1A (TCL1A); T-cell receptor (delta D2-J1-region) (clone K3B); T-cell receptor delta gene D2-J1-region, clone K3B; T-cell receptor germline beta chain gene V-region (V) V-beta-MT1-1; T-cell receptor germline beta-chain gene J2.1 exon; T-cell receptor germline delta-chain D-J region; T-cell receptor interacting molecule (TRIM) protein; T-cell receptor rearranged delta-chain, V-region (V-delta 3-J); T-cell receptor, alpha (V,D,J,C) (TCRA); T-cell receptor, beta cluster (TCRB); T-cell receptor, delta (V,D,J,C) (TCRD); T-cell, immune

regulator 1 (TCIRG1); TCF-1 mRNA for T cell factor 1; TCR eta =T cell receptor(eta-exon); TCR V Beta 13.2; TERA; testis enhanced gene transcript (TEGT); tetracycline transporter-like protein (TETRAN); tetratricopeptide repeat domain 1 (TTC1); tetratricopeptide repeat domain 2 (TTC2); tetratricopeptide repeat domain 3 (TTC3); TGFB1-induced anti-apoptotic factor 1 (TIAF1); thioredoxin reductase 1 (TXNRD1); threonyl-tRNA synthetase (TARS); thrombin inhibitor; thrombospondin 1 (THBS1); thromboxane A synthase 1 (platelet, cytochrome P450, subfamily V) (TBXAZ1); thymidine kinase 2, mitochondrial (TK2); thymidylate kinase (CDC8); thymine-DNA glycosylase (TDG); Thymosin, beta 10 (TMSB10); thymosin, beta 4, X chromosome (TMSB4X); thyroid autoantigen 70kD (Ku antigen) (G22P1); thyroid hormone receptor coactivating protein (SMAP); thyroid hormone receptor interactor 7 (TRIP7); thyroid hormone receptor interactor 8r (TRIP8); thyroid hormone receptor-associated protein, 230 kDa subunit (TRAP230); thyroid receptor interacting protein 15 (TRIP15); TI-227H; TIA1 cytotoxic granule-associated RNA-binding protein (TIA1); tissue inhibitor of metalloproteinase 1 (erythroid potentiating activity, collagenase inhibitor) (TIMP1); tissue inhibitor of metalloproteinase 2 (TIMP2); tissue specific transplantation antigen P35B (TSTA3); titin (TTN); TNF receptor-associated factor 2 (TRAF2); TNF receptor-associated factor 3 (TRAF3); toll-like receptor 1 (TLR1); toll-like receptor 2 (TLR2); toll-like receptor 4 (TLR4); toll-like receptor 5 (TLR5); topoisomerase (DNA) I (TOP1); topoisomerase (DNA) II beta (180kD) (TOP2B); topoisomerase (DNA) III beta (TOP3B); TR3beta; TRAF family member-associated NF-kB activator (TANK); transaldolase 1 (TALDO1); transaldolase-related protein; transcobalamin II (TCII); transcription elongation factor B (SIII), polypeptide 1-like (TCEB1L); transcription elongation factor B (SIII), polypeptide 3 (110kD, elongin A) (TCEB3); transcription factor 12 (HTF4, helix-loop-helix transcription factors 4) (TCF12); transcription factor 17 (TCF17); transcription factor 4 (TCF4); transcription factor 6-like 1 (mitochondrial transcription factor 1-like) (TCF6L1); transcription factor 7-like 2 (T-cell specific, HMG-box) (TCF7L2); transcription factor binding to IGHM enhancer 3 (TFE3); transcription factor IL-4 Stat; transcription factor TFIID; transcriptional adaptor 2 (ADA2, yeast, homolog)-like (TADA2L); transducin (beta)-like 1 (TBL1); transducin-like enhancer of split 3, homolog of Drosophila E(sp1) (TLE3); Transformation/transcription domain-associated protein (TRRAP); transformation-sensitive, transforming growth factor beta-stimulated protein TSC-22 (TSC22); transforming growth factor, beta receptor III (betaglycan, 300kD) (TGFB3); transforming growth factor, beta-

induced, 68kD (TGFB1); transgelin 2 (TAGLN2); trans-Golgi network protein (46, 48, 51kD isoforms) (TGN51); transient receptor potential channel 1 (TRPC1); transketolase (Wernicke-Korsakoff syndrome) (TKT); translation factor su11 homolog (GC20); translin (TSN); translin-associated factor X (TSNAX); transmembrane glycoprotein (A33); transmembrane protein (63kD), endoplasmic reticulum/Golgi intermediate compartment (P63); transmembrane protein 1 (TMEM2); transmembrane trafficking protein (TMP21); transporter 1, ABC (ATP binding cassette) (TAP1); Treacher Collins-Franceschetti syndrome 1 (TCOF1); triosephosphate isomerase 1 (TPI1); tropomyosin; tropomyosin 4 (TPM4); TRPM-2 protein; tryptophan rich basic protein (WRB); tryptophanyl-tRNA synthetase (WARS); Ts translation elongation factor, mitochondrial (TSFM); topoisomerase (DNA) II beta (180kD); Tu translation elongation factor, mitochondrial (TUFM); tuberous sclerosis 1 (TSC1); tuberous sclerosis 2 (TSC2); tubulin, alpha 1 (testis specific) (TUBA1); tubulin, alpha, ubiquitous (K-ALPHA-1); tubulin-specific chaperone c (TBCC); tumor necrosis factor (ligand) superfamily, member 10 (TNFSF10); tumor necrosis factor (ligand) superfamily, member 13 (TNFSF13); tumor necrosis factor (ligand) superfamily, member 14 (TNFSF14); tumor necrosis factor (ligand) superfamily, member 6 (TNFSF6); tumor necrosis factor (ligand) superfamily, member 8 (TNFSF8); tumor necrosis factor alpha-inducible cellular protein containing leucine zipper domains (FIP2); Tumor necrosis factor receptor superfamily member 7 (TNFRSF7); tumor necrosis factor receptor superfamily, member 10b (TNFRSF10B); tumor necrosis factor receptor superfamily, member 10c, decoy without an intracellular domain (TNFRSF10C); tumor necrosis factor receptor superfamily, member 12 (translocating chain-association membrane protein) (TNFRSF12); tumor necrosis factor receptor superfamily, member 14 (herpesvirus entry mediator) (TNFRSF14); tumor necrosis factor receptor superfamily, member 1B (TNFRSF1B); tumor necrosis factor receptor superfamily, member 6 (TNFRSF6); tumor necrosis factor receptor superfamily, member 7 (TNFRSF7); tumor necrosis factor, alpha-induced protein 2 (TNFAIP2); tumor necrosis factor, alpha-induced protein 3 (TNFAIP3); tumor protein 53-binding protein, 1 (TP53BP1); tumor protein p53 (Li-Fraumeni syndrome) (TP53); Tumor protein p53-binding protein (TP53BPL); tumor protein, translationally-controlled 1 (TPT1); tumor rejection antigen (gp96) 1 (TRA1); tumorous imaginal discs (Drosophila) homolog (TID1); TXK tyrosine kinase (TXK); type II integral membrane protein (NKG2-E); TYRO protein tyrosine kinase binding protein (TYROBP); tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta



polypeptide (YWHAB); tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide (YWHAZ); Tyrosine kinase 2 (TYK2); tyrosyl-tRNA synthetase (YARS); U1 small nuclear RNA; U2(RNU2) small nuclear RNA auxillary factor 1 (non-standard symbol) (U2AF1); U22 snoRNA host gene (UHG); U4/U6-associated RNA splicing factor (HPRP3P); U49 small nuclear RNA; U5 snRNP-specific protein (220 kD), ortholog of *S. cerevisiae* Prp8p (PRP8); U5 snRNP-specific protein, 116 kD (U5-116KD); U5 snRNP-specific protein, 200 kDa (DEXH RNA helicase family) (U5-200-KD); Uba80 mRNA for ubiquitin; ubiquinol-cytochrome c reductase (6.4kD) subunit (UQCR); ubiquitin A-52 residue ribosomal protein fusion product 1 (UBA52); ubiquitin activating enzyme E1-like protein (GSA7); ubiquitin C (UBC); ubiquitin carboxyl-terminal esterase L3 (ubiquitin thiolesterase) (UCHL3); ubiquitin fusion degradation 1-like (UFD1L); ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A); ubiquitin specific protease 10 (USP10); ubiquitin specific protease 11 (USP11); ubiquitin specific protease 15 (USP15); ubiquitin specific protease 19 (USP19); ubiquitin specific protease 4 (proto-oncogene) (USP4); ubiquitin specific protease 7 (herpes virus-associated) (USP7); ubiquitin specific protease 8 (USP8); ubiquitin-activating enzyme E1 (A1S9T and BN75 temperature sensitivity complementing) (UBE1); ubiquitin-activating enzyme E1, like (UBE1L); UBIQUITIN-BINDING PROTEIN P62; phosphotyrosine independent ligand for the Lck SH2 domain p62 (P62); ubiquitin-conjugating enzyme E2 variant 1 (UBE2V1); ubiquitin-conjugating enzyme E2 variant 2 (UBE2V2); ubiquitin-conjugating enzyme E2B (RAD6 homolog) (UBE2B); ubiquitin-conjugating enzyme E2G 2 (homologous to yeast UBC7) (UBE2G2); ubiquitin-conjugating enzyme E2H (homologous to yeast UBC8) (UBE2H); ubiquitin-conjugating enzyme E2L 1 (UBE2L1); ubiquitin-conjugating enzyme E2L 3 (UBE2L3); ubiquitin-conjugating enzyme E2L 6 (UBE2L6); ubiquitin-like 1 (sentrin) (UBL1); UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 2 (GalNAc-T2) (GALNT2); unactive progesterone receptor, 23 Kd (P23); unconventional myosin-ID (MYO1F); uncoupling protein homolog (UCPH); uppressor of Ty (*S.cerevisiae*) 6 homolog; upregulated by 1,25-dihydroxyvitamin D-3 (VDUP1); upstream binding factor (hUBF); UV radiation resistance associated gene (UVRAG); vacuolar proton-ATPase, subunit D; V-ATPase, subunit D (ATP6DV); v-akt murine thymoma viral oncogene homolog 1 (AKT1); Vanin 2 (VNN2); vasodilator-stimulated phosphoprotein (VASP); vav 1 oncogene (VAV1); vav 2 oncogene

(VAV2); v-crk avian sarcoma virus CT10 oncogene homolog (CRK); v-erb-b2 avian erythroblastic leukemia viral oncogene homolog 3 (ERBB3); Vesicle-associated membrane protein 1 (synaptobrevin 1) (VAMP1); vesicle-associated membrane protein 3 (cellubrevin) (VAMP3); v-fos FBJ murine osteosarcoma viral oncogene homolog (FOS); villin 2 (ezrin) (VIL2); villin-like protein; vimentin (VIM); vinculin (VCL); vitamin A responsive; cytoskeleton related (JWA); v-jun avian sarcoma virus 17 oncogene homolog (JUN); v-myb avian myeloblastosis viral oncogene homolog (MYB); voltage-dependent anion channel 1 (VDAC1); voltage-dependent anion channel 3 (VDAC3); von Hippel-Lindau syndrome (VHL); v-raf murine sarcoma 3611 viral oncogene homolog 1 (ARAF1); v-raf-1 murine leukemia viral oncogene homolog 1 (RAF1); v-ral simian leukemia viral oncogene homolog B (ras related; GTP binding protein) (RALB); V-rel avian reticuloendotheliosis viral oncogene homolog A (nuclear factor of kappa light polypeptide gene enhancer in B-cells 3 (p65)) (RELA); v-yes-1 Yamaguchi sarcoma viral related oncogene homolog (LYN); WD repeat domain 1 (WDR1); WD-repeat protein (HAN11); Williams-Beuren syndrome chromosome region 1 (WBSCR1); Wiskott-Aldrich syndrome protein interacting protein (WASPIP); X (inactive)-specific transcript (XIST); xeroderma pigmentosum, complementation group C (XPC); XIAP associated factor-1; XIB; X-linked anhidrotic ectodermal dysplasia; X-ray repair complementing defective repair in Chinese hamster cells 5 (double-strand-break rejoining; Ku autoantigen, 80kD) (XRCC5); XRP2 protein; yeloid differentiation primary response gene (88) (MYD88); zeta-chain (TCR) associated protein kinase (70kD) (ZAP70); zinc finger transcriptional regulator (GOS24); zinc-finger helicase (hZFH); Zn-15 related zinc finger protein (rlf); ZNF80-linked ERV9 long terminal repeat; ZW10 (Drosophila) homolog, centromere/kinetochore protein (ZW10); and zyxin (ZYX);

thereby characterizing a body state in a human subject.

59. (New) The method of claim 58, wherein the body state is a disease.

60. (New) The method of claim 59, wherein the disease is a heart failure.

61. (New) The method of claim 59, wherein the disease is colorectal cancer.

62. (New) The method of claim 58, wherein the subject is healthy.

63. (New) The method of claim 58, wherein determining the level is performed using at least one oligonucleotide of predetermined sequence.

64. (New) The method of claim 63, wherein the at least one oligonucleotide is specific for RNA encoded only by the gene in blood of human subjects, and/or is specific for cDNA complementary to RNA encoded only by the gene in blood of human subjects.

65. (New) The method of claim 64, wherein determining the level is performed by amplifying of RNA encoded by the gene to form amplified product, using at least one primer, and quantifying the amplified product, wherein the at least one oligonucleotide comprises the at least one primer.

66. (New) The method of claim 64, wherein determining the level is performed by hybridizing cDNA complementary to RNA encoded by the gene with at least one immobilized probe to form hybridization product, and quantifying the hybridization product, wherein the at least one oligonucleotide comprises the at least one probe.

67. (New) The method of claim 58, wherein determining the level is performed by amplifying RNA encoded by the gene.

68. (New) The method of claim 58, wherein determining the level is performed using an immobilized probe.

69. (New) The method of claim 58, wherein determining the level is performed by quantifying cDNA generated from RNA encoded by said gene.

70. (New) The method of claim 58, wherein determining the level is performed by quantifying EST generated from RNA encoded by the gene.

71. (New) The method of claim 58, wherein the level of RNA encoded by the gene is

determined relative to a level of RNA encoded by an internal control gene in the blood sample.